

ISM-PRO SOFTWARE DIGITAL MICROSCOPE OPERATION MANUAL



Description

- ① IISM-PRO software is for ISM-PM200SA, ISM-PM200SB, ISM-PM600SA, ISM-PM160L digital microscopes. It contains many functions, such as taking picture, taking video, measuring and soon.
- ② Operating system: Windows, MAC
- ③ The below table shows relationship between magnification and accuracy.

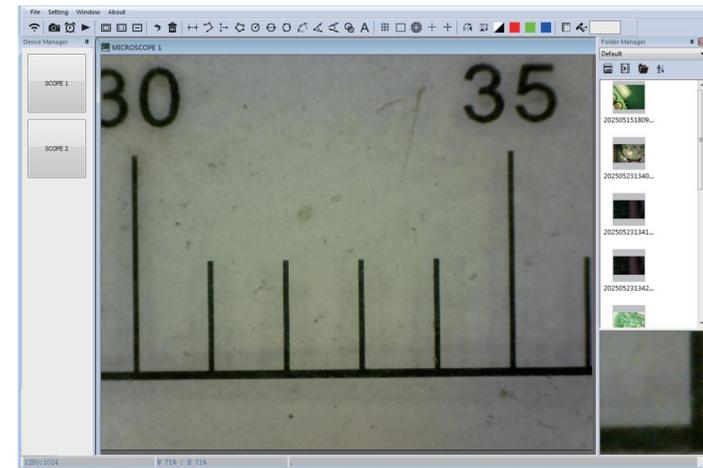
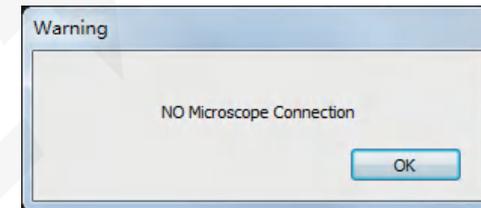
ISM-PM200SA, ISM-PM200SB		ISM-PM600SA		ISM-PM160L	
Magnification	Accuracy	Magnification	Accuracy	Magnification	Accuracy
50X	30μm	450X	6μm	50X	30μm
100X	15μm	500X	6μm	100X	15μm
150X	10μm	550X	5μm	150X	10μm
200X	8μm	600X	5μm		

User guide: Working at Wired USB Mode

1. Download and install the application "Hiview Plus" (for windows and Mac OS)
2. Connect to PC's USB port with USB cable; the power LED indicator will light, as well as charge indicator LED (Battery is being charged)
3. Open "Hiview Plus" app, and click " " to display video. The illumination LED lights up as soon as the application software is running
4. Please refer to the detailed manuals inside the CD: Hiview Plus Manual

Hiview Plus on Windows Computer

Double-click Hiview Plus icon after completing installation to if pop-up to indicate that USB microscope is not connected, please click "OK" to pop-up the below screen



Tool Bar

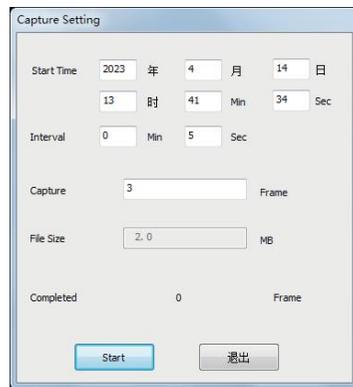


: Double click the icon to preview for USB Microscope

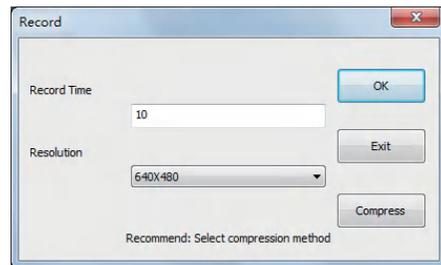
: Click the icon to preview for Wi-Fi Microscope

: Take a picture

: Timer for photo capture



: Record a video: you can click to start and stop recording a video

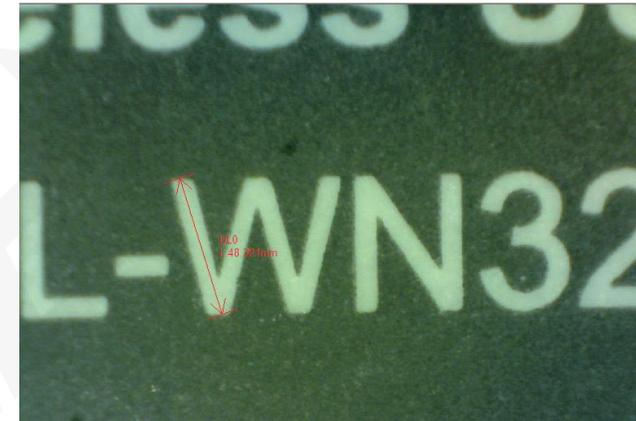


: Full display. : Normal: Normal the actual size. : Zoom out: zoom in the view window

: Undo: undo the last action. : Delete: delete all measurement



Line Measurement: The line measurement allows you to measure the linear distance between two points. Simple left-click and drag to the desired length, and click again to finish.



Continuous line Measurement: The continuous line function allows measurement of the distance between multiple connecting lines. Simply click and drag to from on section of distance, click again to start another section. Continue until the total desired distance is measured. Right click to finish.





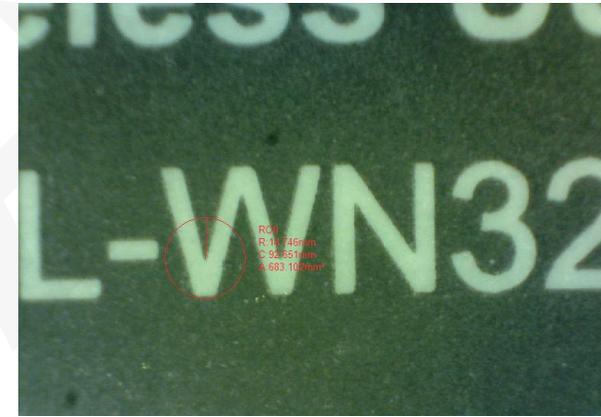
Point to line measurement: the point to line measurement feature allows measurement of a line 90 degree from a certain line. Simply create a line to represent the base(e.g. the light blue line in the sample picture below) by clicking once to start, drag, and then click again to set the endpoint. Branch off from the base line to start measuring the line that is 90 degrees from the base line and a final click to finish the measurement.



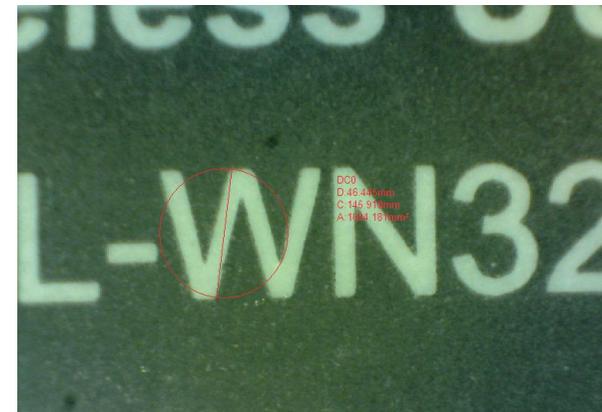
Polygon Measurement: The polygon measurement feature allows measurement of a polygon. Simply click and drag to from the desired length, and click again to start the next section. When finished, double-click to finish the polygon measurement.



Radius of Circle Measurement: The radius of circle measurement allows you to measure the circumference , area, and radius of a circle. Simply click and extend out to the desired radius.

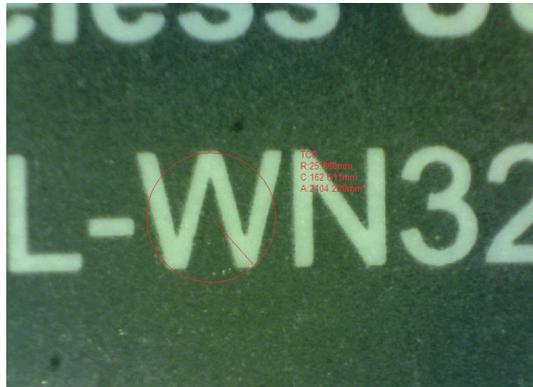


Diameter of Circle Measurement: The diameter of a circle measurement allows you to measure the circumference, area, and radius of a circle. Simply click and extend out to the desired diameter.

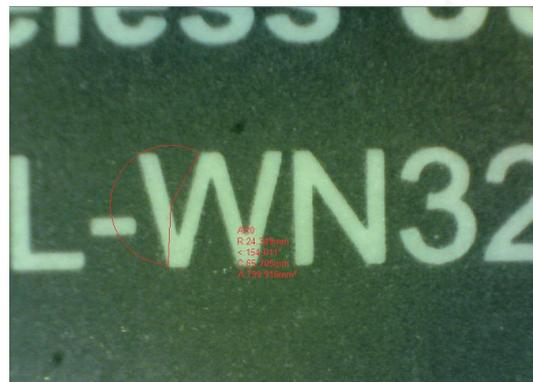




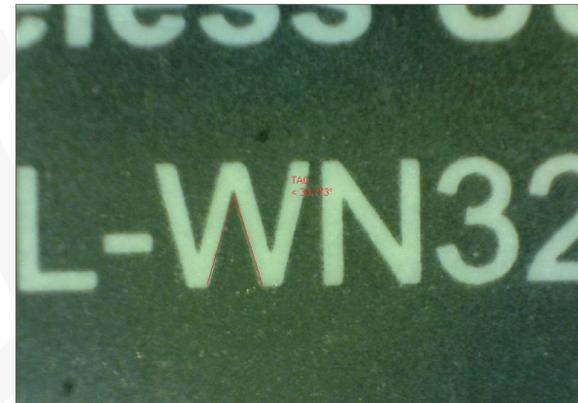
Three Points Circle Measurement: The three points circle measurement allows the measurement of the circumference, area, and radius of a circle. Simply click on any three points on the circle you wish to measure.



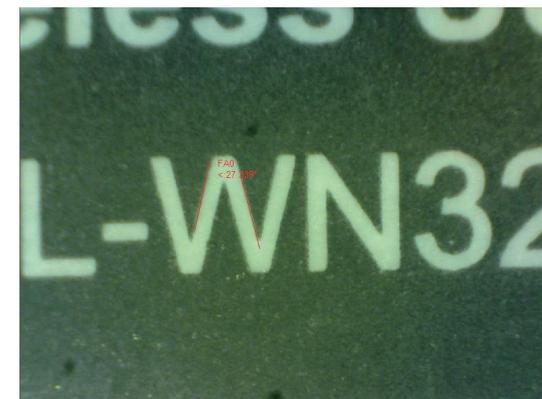
Three Points Arc Measurement: The three points arc measurement allows a measurement of an arc. Click on three consecutive points on an arc to measure.



Three Point Angle Measurement: The three point angle measurement allows the measurement of an angle. Start at the pivot point and extend out to start measuring an angle.

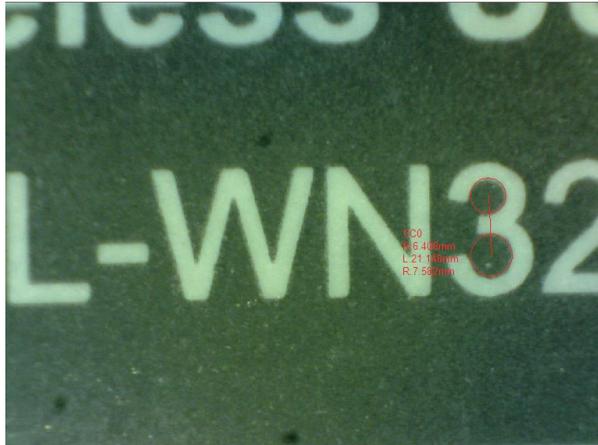


Four Point Angle Measurement: The four point angle measurement allows the measurement of an angle by selecting four points. Simply select two points from one line segment and another two points from another line segment to complete the angle measurement.





Circle Distance: draw two circle and measure the distance of the two circles.

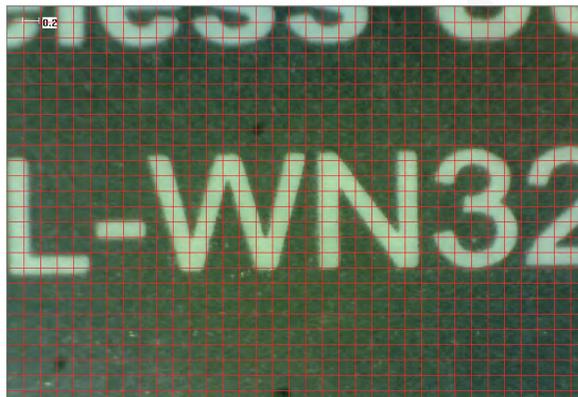


A

Add Text: The text tool lets you write text anywhere on the video and picture.



Gridlines: you can add gridlines to the live video and images. The pitch will match the magnification inputted.



Fixed rectagle

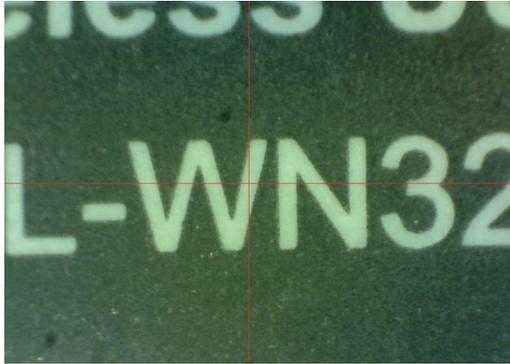


Circle Grid: you can add circle grid to the live video and images. The pitch will match the magnification inputted.

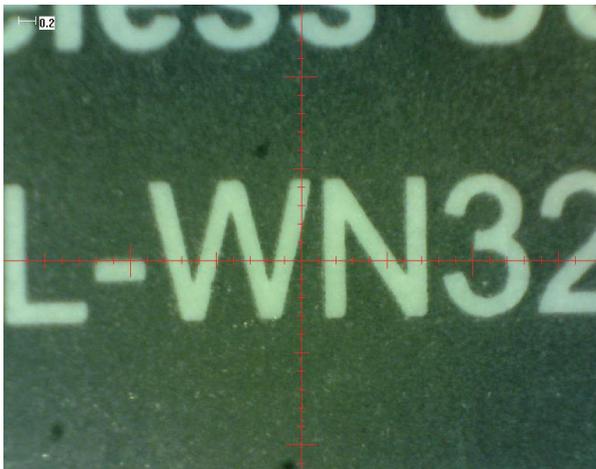




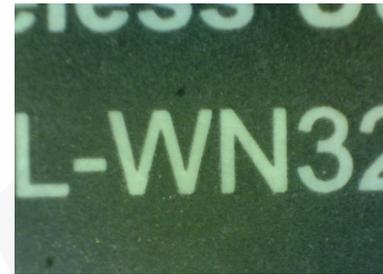
Crosshair: you can add a crosshair to the live video and images. The crosshair XY position can be moved when you select it. The cursor position is the location of the mouse pointer and location 0,0 is center coordinates of the crosshair.



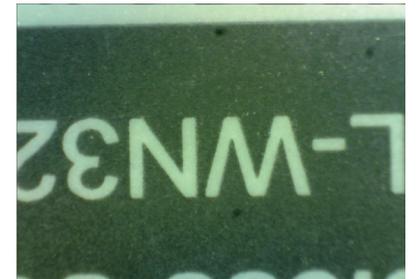
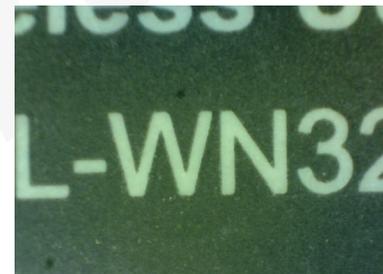
Scale Crosshair: you can add a scale crosshair to the live video and images. The crosshair XY position can be moved when you select it.



Horizontal Flip: flip an image horizontally.



Vertically Flip: Flip image vertically.



:Negative



: Monochrome image: Red monochrome image

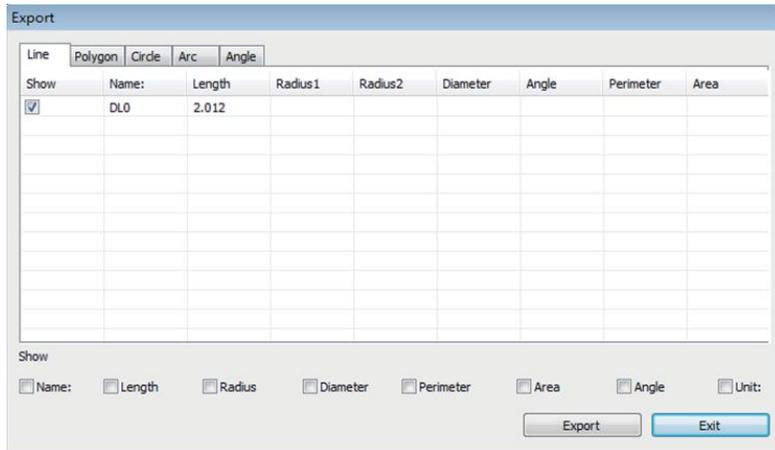


: Monochrome image: Green monochrome image



: Monochrome image: Blue monochrome image

Clicking on the  icon allows you to show or hide the measurement properties window. The measurement property window organizes and shows the status of all the measurements as well the ability to adjust how the results are shown on the image.



The Tabs

The Hiview Plus software separate each type of measurements into tabs helping you to organize your measurements.

Line: The line tab show all the properties of the line measurements as well as the ability to select what information is shown on the image, ability to delete, change units of measurement and also export data to excel.

Polygon: The polygon tab shows all the properties of the polygon measurements. As well as the ability to select what information is shown on the image, ability to delete, change units of measurement, and also export data to excel.

Circle: The Circle tab shows all the properties of the circle measurements. As well as the ability to select what information is shown on the image, ability to delete, change units of measurement, and also export data to excel.

Arc: The Arc tab shows all the properties of the arc measurements. As well as the ability to select what information is shown on the image, ability to delete, change units of measurement, and also export data to excel.

Angle: The Angle tab shows all the properties of the angle measurements. As well as the ability to select what information is shown on the image, ability to delete, change units of measurement, and also export data to excel.

Categories

Show –The show checkbox let you see the measurement result for the selected measurement on the image. Deselecting the checkbox hides the selected measurement results.

Name –Display the name of the measurement.

Length –Display the length of the measurement.

Area –Display the area of the measurement.

Radius –Display the radius of the measurement.

Angle –Display the angle of the measurement.

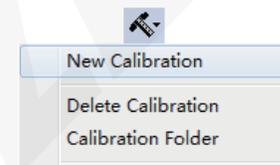
Unit –Display the unit of measure on the picture.

Delete: Select a measurement and click on “Delete” to remove the measurement.

Delete all: Clear all measurements and drawings on the active window.

Export to excel: Exports data from the active windows to excel.

Calibration Menu



No Calibration: Use the default measurement settings.

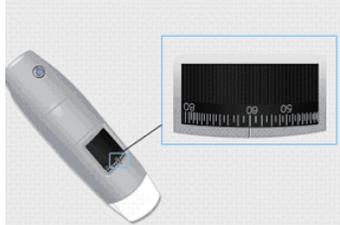
New Calibration: Create a new calibration profile.

Open Calibration: Opens the folder where your calibration setting are located. From that window, you can select already created calibration profiles or delete them.

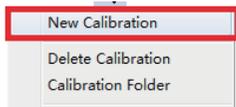
Warning: Must calibrate before any measurement function at each focus magnification.

How to calibrate measurements

Select a known measurement standard as the to-be-observed object, such as a ruler, to be used for calibration. Bring photo of the selected ruler into focus by turning the “Focus & Magnification adjustment wheel”, determine the magnification by taking a reading from the scale on the focus dial as below(The default magnification is 60):



1. In the live video window select the calibration drop down menu.
2. Select “New Calibration”.



3. A small window will pop-up, please enter profile name(60x) and the actual length(2). Drag the mouse to draw a line which has actual length.

Calibration

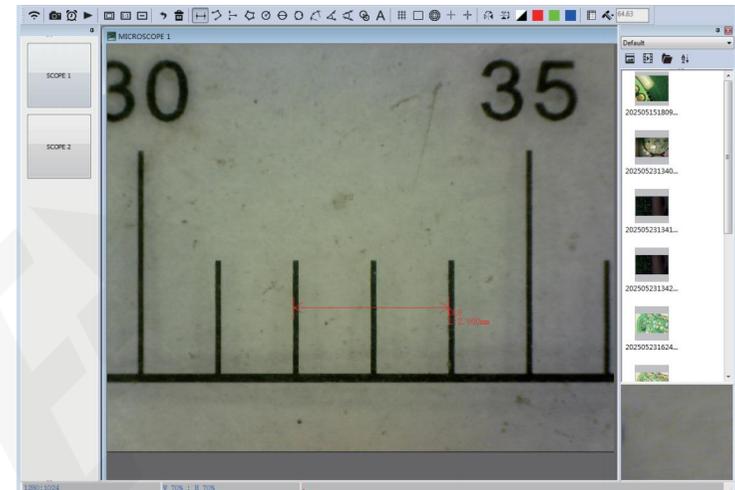
Name:

Magnification(> 0):

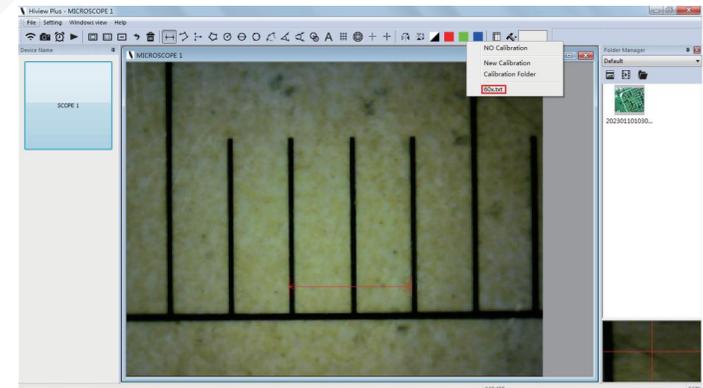
Actual Length:

Unit:

Please draw one line with actual length, and then click 'OK'

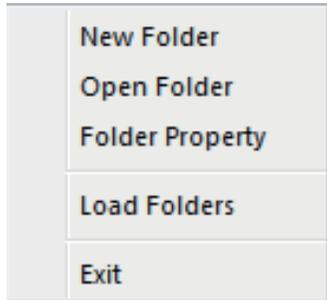


4. Press “OK” button to finish calibration.

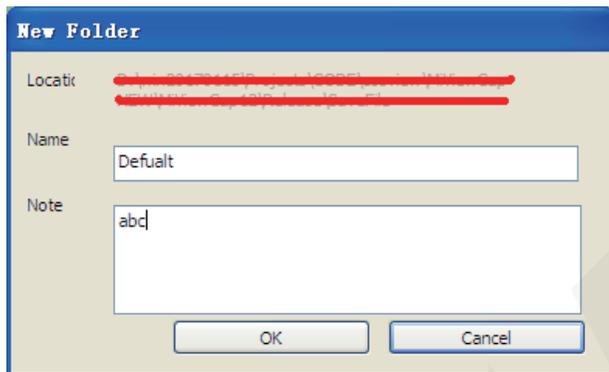


Now the calibration is completed, you can make measurement features accurately on taken photos or real-time video at this focus point (Don't subsequently adjust the “Focus & Magnification adjustment wheel”). If the new photo object is not in focus, please only adjust the distance between the microscope and the object till the photo is clear, and then capture the photo to measure it.

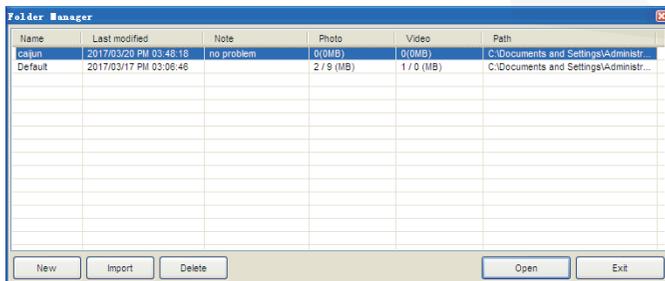
Menu
File.



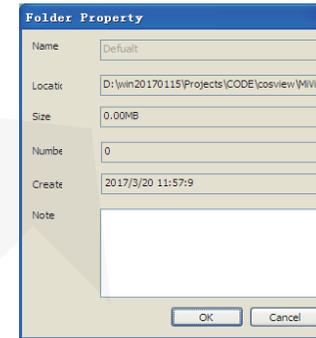
New Folder: Display the “New Folder” window that allow you to create a new folder to save pictures/videos.



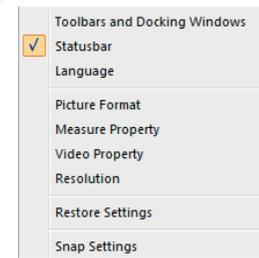
Folder Manager: Display the “Folder Manager” window, which allows you import, create, open, delete, as well as change the sorting order of folders.



Folder Properties: Display the “Folder Property” window. Allow you to see the properties of the current save folder and also allow changing the name and edit notes about the current save folder.



Exit: Exits Hiview Plus software.

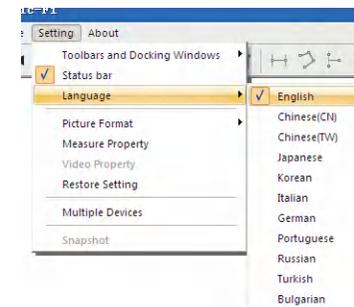


Setting:

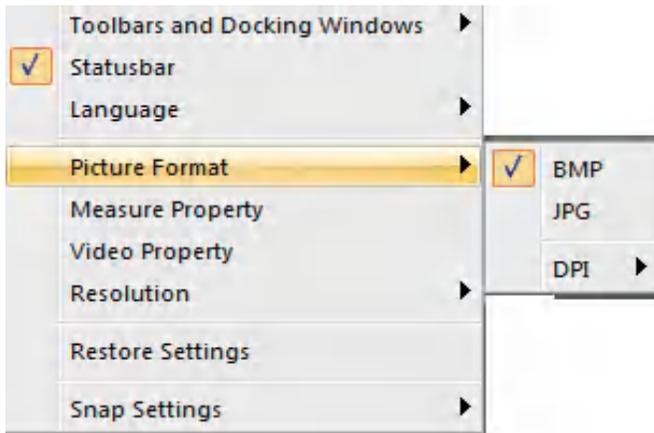
Toolbar and Docking windows: Check to show the tool bar. Uncheck to hide the tool bar

Status bar: Check to show the status bar. Uncheck to hide the status bar.

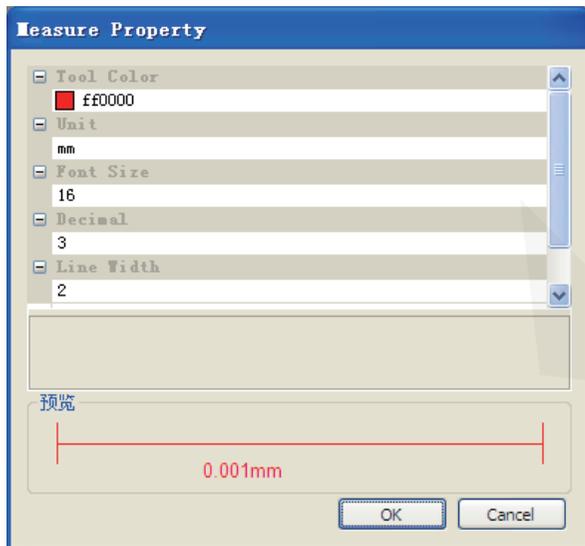
Language: The language selection allows you to select the Hiview Plus interface language.



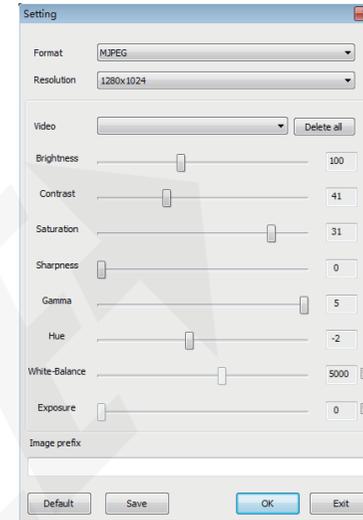
Picture Format: Change the default picture format from BMP to JPG and also set the default picture DPI settings to 96,180,240,300.



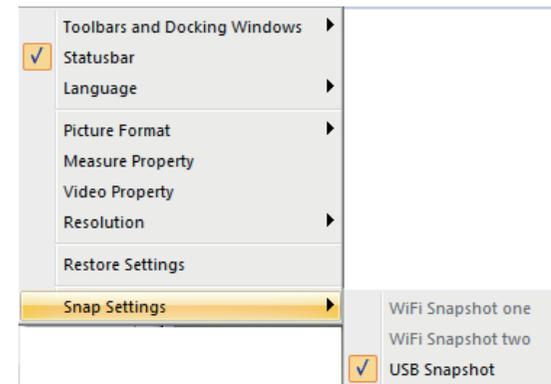
Measure Setting: click to pop-up the measure setting: (If the "Line width" is 2 or 3 Pixel, the "Pen Type" must be Solid-Line)



Video Setting: Microscope adjustment window.



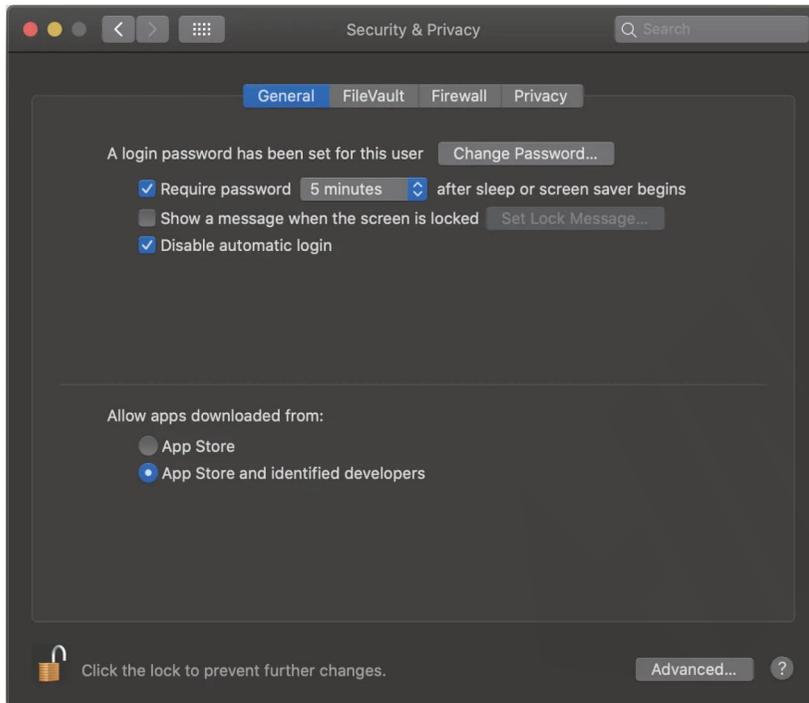
Restore Settings: Restore default settings.
Snapshot Enable: Enable the button snapshot.



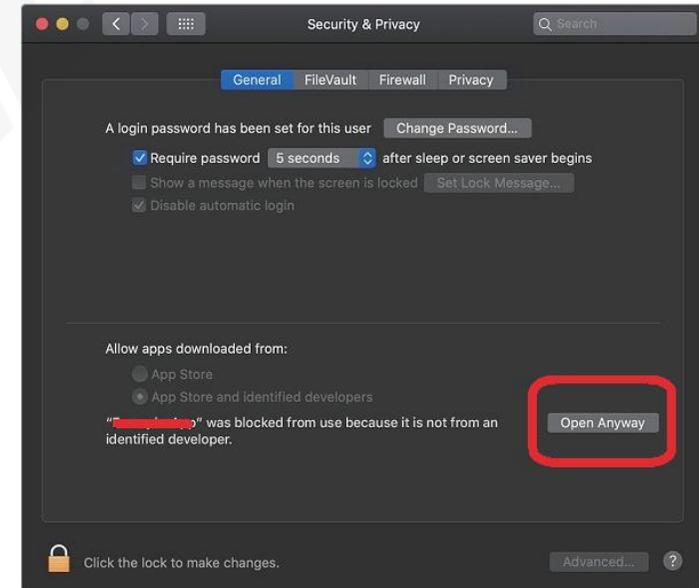
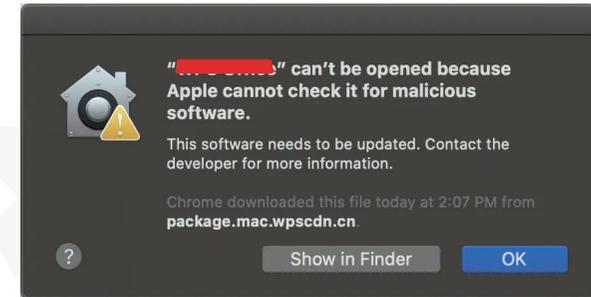
WiFi snapshot one / WiFi snapshot is for WiFi modal of microscope
USB snapshot is for usb modal of microscope.

Hiview Plus on Mac Computer

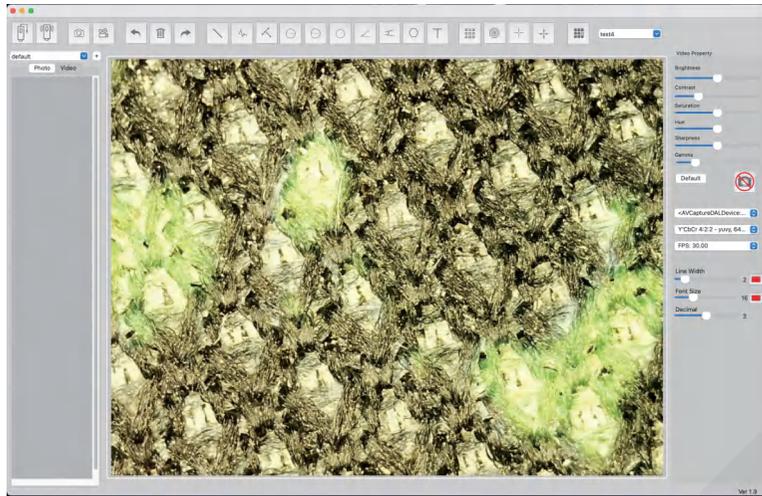
The security and privacy preferences of Mac will be set to allow the installation of apps from the App Store and recognized developers. By default, the security and privacy preferences will be set to allow installation from the App Store, so you need to click on "Security and Privacy" in "System Preferences" and then click on "General". Click on the lock icon and enter your password to make the change. Select App Store and Approved Developers under the heading Apps allowed to download from .



If your Mac is set to allow the installation of apps from the App Store and recognized developers, the first time you start a new app, the Mac will ask if you are sure you want to open it, as follows:



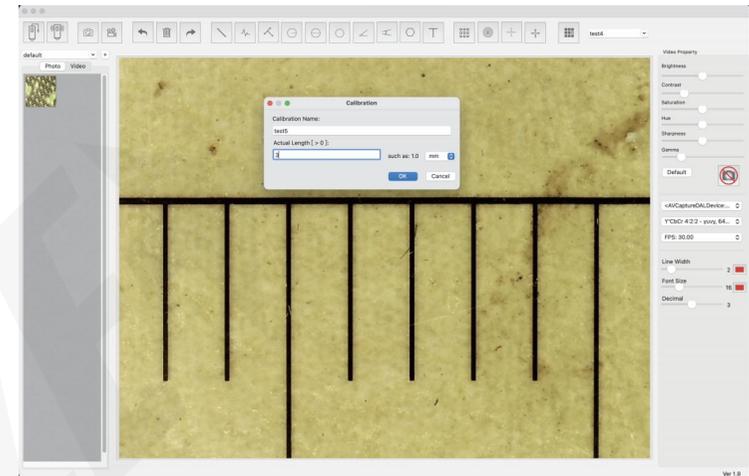
Select "Anywhere" to finish the setting. Now you can install "Hiview Plus" app.
 Double-click Hiview Plus icon  after completing installation to pop-up the below window:



USB mode, please click  or Wi-Fi Mode, please click  "Preview" icon, and then the Hiview Plus main screen will display video as below: (it waits about 5 seconds to display video; if the live video is blank or slow, please click "Preview" icon once again to try.)

-  : Take photo
-  : Take/Stop Video
-  |  |  : Undo; Delete all; Redo

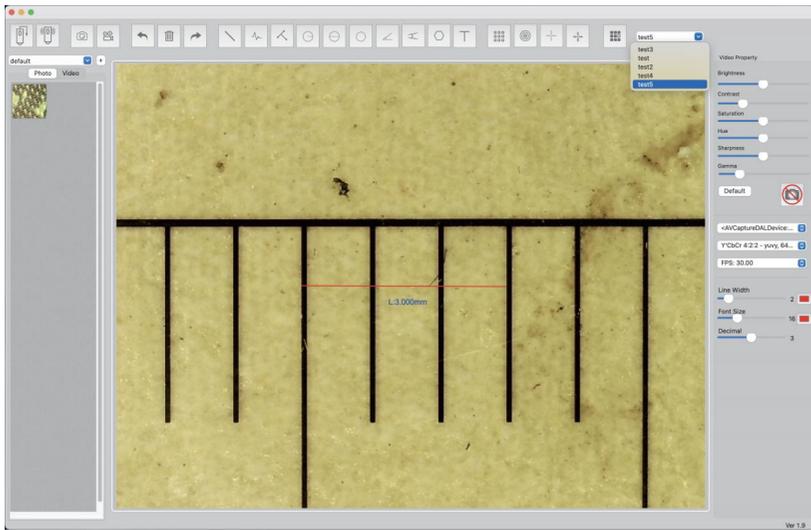
Calibration
 Click  button to start calibration as below:



Input "calibration name" and "actual length", and click [OK] button and then draw line directly to finish calibration (3mm) as below:



When you measure other object, please select a calibration file (for example "cal" at 60 Magnification).



Measurement
└─ Line measurement



Continuous Line Measurement [Control + Click to end]



Point to Line Measurement



Radius Circle Measurement



Three Points Circle



Diameter Circle Measurement



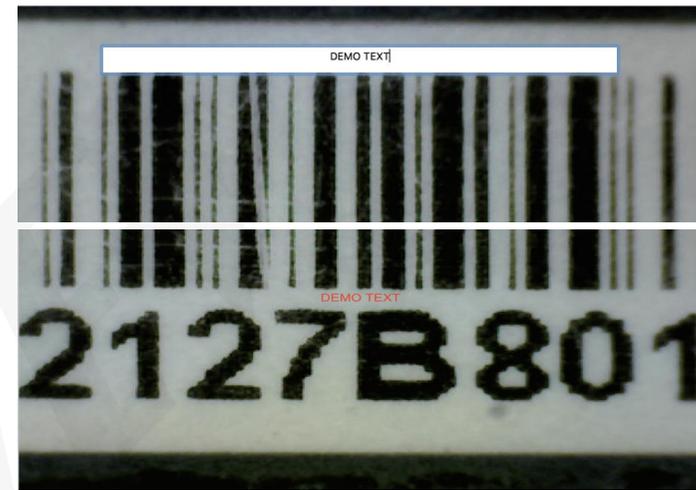
Three Points Angle



Four Points Angle



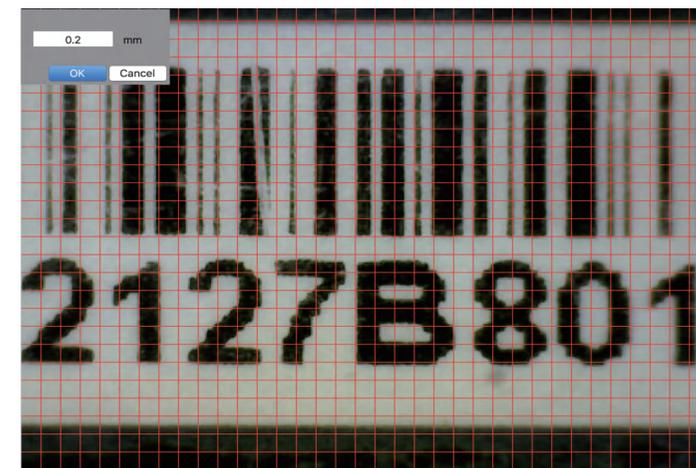
T Add Text



Polygon Measurement [Control + Click to end]



Add GridLine



Add CircleLine



Add Crosshair



Add ScaleLine

