

Micro Capture Software User Manual

Ver7.2

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Chapter 1: Software Installation

1.1 Environmental Requirements for Software Installation

Compatible system: XP, Win7, Win8, Win8.1, Win10

Note: Partial function of this software relies on the installation of the following software:

Microsoft Word 2003 or later version (for exporting report to WORD)

Microsoft Excel 2003 or later version (for exporting report to EXCEL)

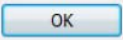
Microsoft Outlook 2003 or later version (for exporting images to email)

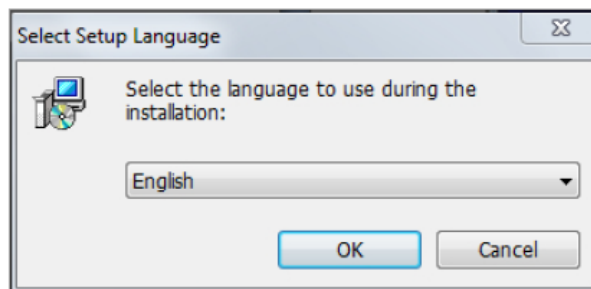
Internet Explorer 7.0 or version above (for wireless connection to PC)

1.2. Installation

Step 1. Activate the computer and insert the installation disk into the DVD.

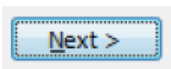
Step 2. Double click the file “Micro Capture Install” under the disk catalogue. When the following

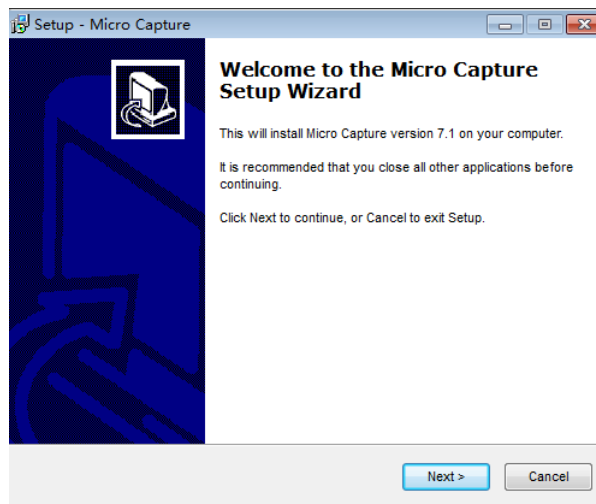
window pops up, please select the installation guide language and press the button “”.

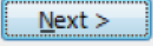


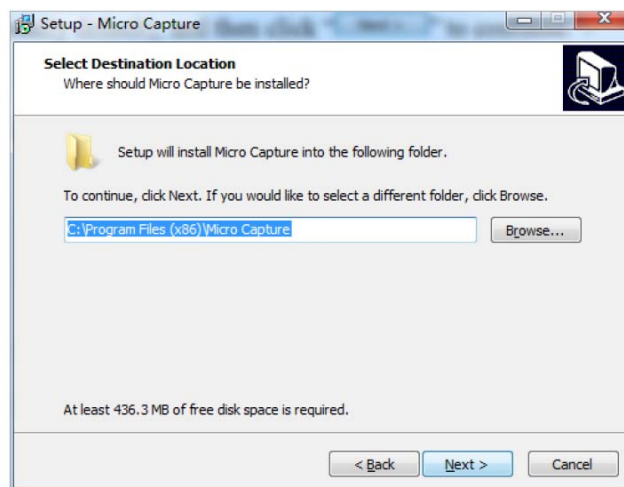
Note: The installation guide language is independent of the software interface language. If you need to change the software interface language, please refer to 2.2 - Modification of Language Function.

Step 3. When the window “Welcome to use Micro Capture Installation Guide” pops up, please

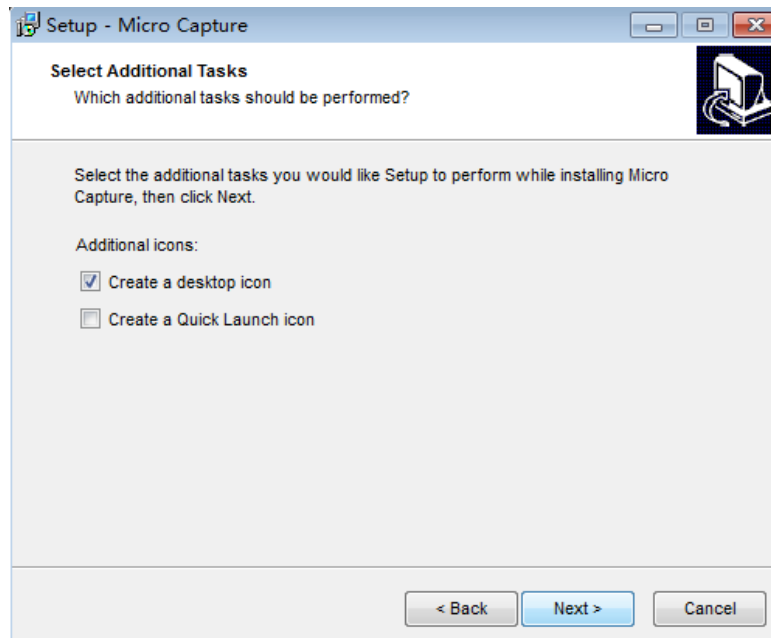
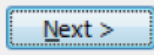
click the button “”.



Step 4. When the window “Please select the target location” pops up, click “Browse” to choose the file path for installation (usually default), and then click “” to continue.

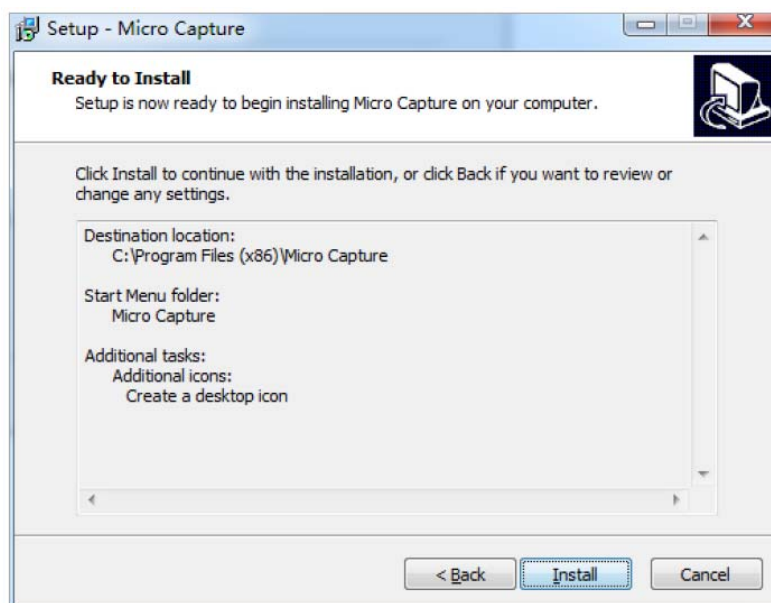


Step 5. When following window appears, select the shortcut you need, and then click the button



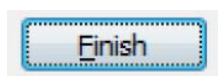
Step 6. Confirm information like “the target location” of software installation. After


confirmation, please click the button

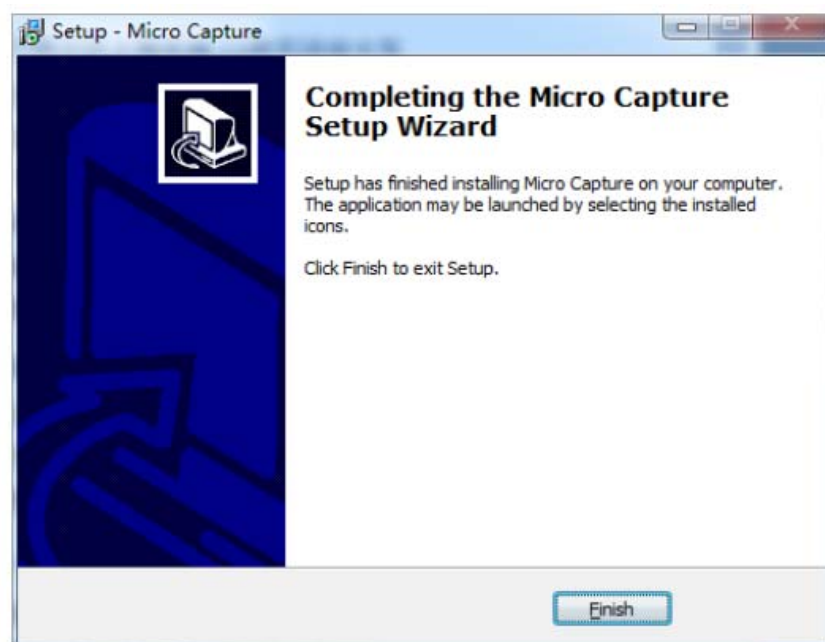


Step 7. An installation progress bar will appear during the software installation procedure. The software installation necessitates the registration of some runtime libraries, which might be intercepted by some antivirus software. If such interception pops up, please allow the procedure to continue.

Step 8. An installation progress bar will appear during the software installation procedure. When the following window appears, the software has been installed successfully. Then click the button



to complete the installation. After closing the window, check the icon  on your desk. If you fail to find it, please find it from the path “Start”→“All programs”.

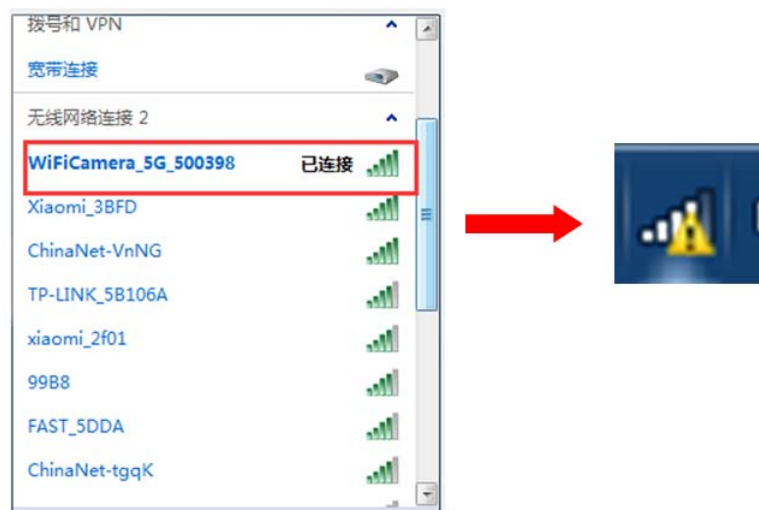


Note: This software supports connecting the camera to PC through wired or wireless way.

Wired connection: just connect the camera to USB port of PC. If it is a WiFi camera, please dial the hardware switch of WiFi camera to USB working state in advance.

Wireless connection: only valid for WiFi camera.

1. Please switch the hardware switch of WiFi camera to WiFi working state in advance
2. Connect your computer to the WiFi camera, please confirm that your computer has a wireless network in advance. Since the default of our camera is 5G WiFi IEEE 802.11ac protocol, please confirm in advance that your computer wireless network supports this protocol. If not, please refer to the hardware specification of the camera and switch the camera to 2.4G WiFi IEEE 802.11b before connecting with the PC.
3. After starting the WiFi camera, search for WiFi name (WiFi camera xxxx) in the network connection. The default connection password is 12345678



4. Run the software

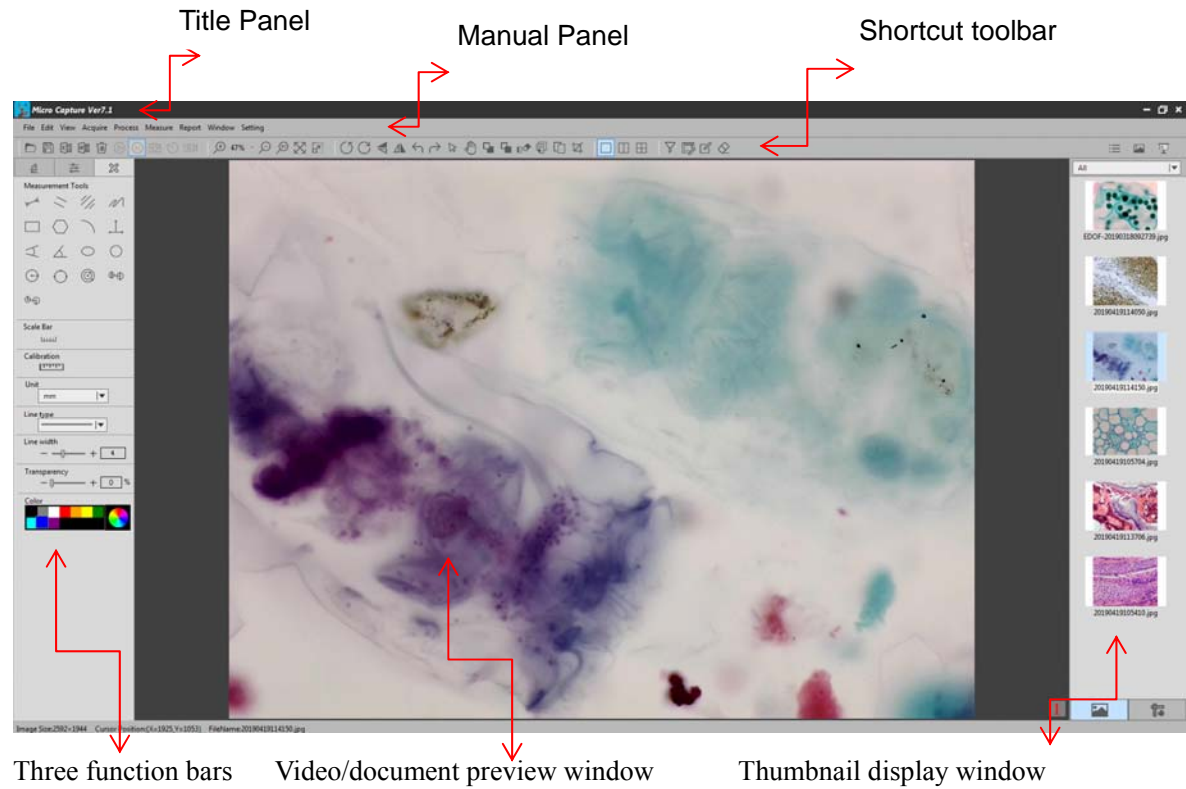
Select the "📹" button in the shortcut toolbar, and then select "WiFiCamera" from the



"selection in the upper right corner of the software. Wait a moment for the PC to connect to the WiFi camera.

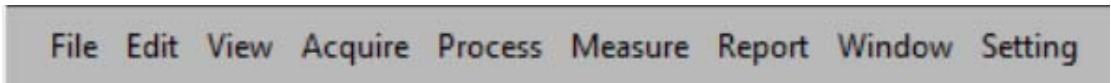
Chapter 2: Software Instructions

2.1 Software Operation Interface and Instruction

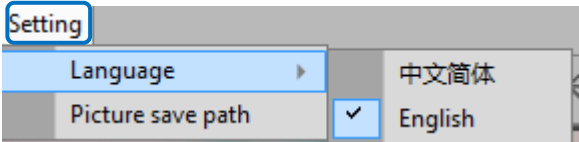
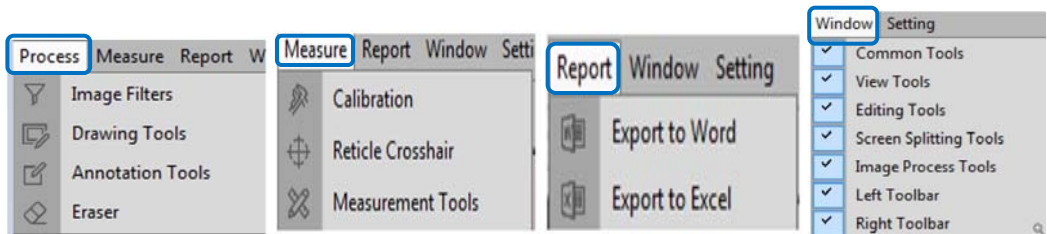
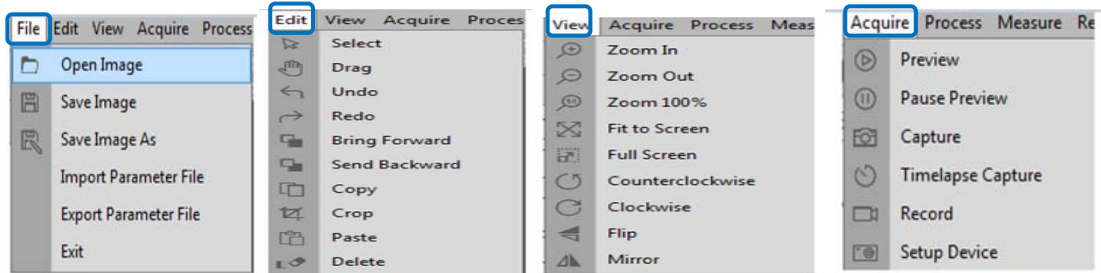


- ◆ Working mode
- ◆ Camera control
- ◆ Measuring tool

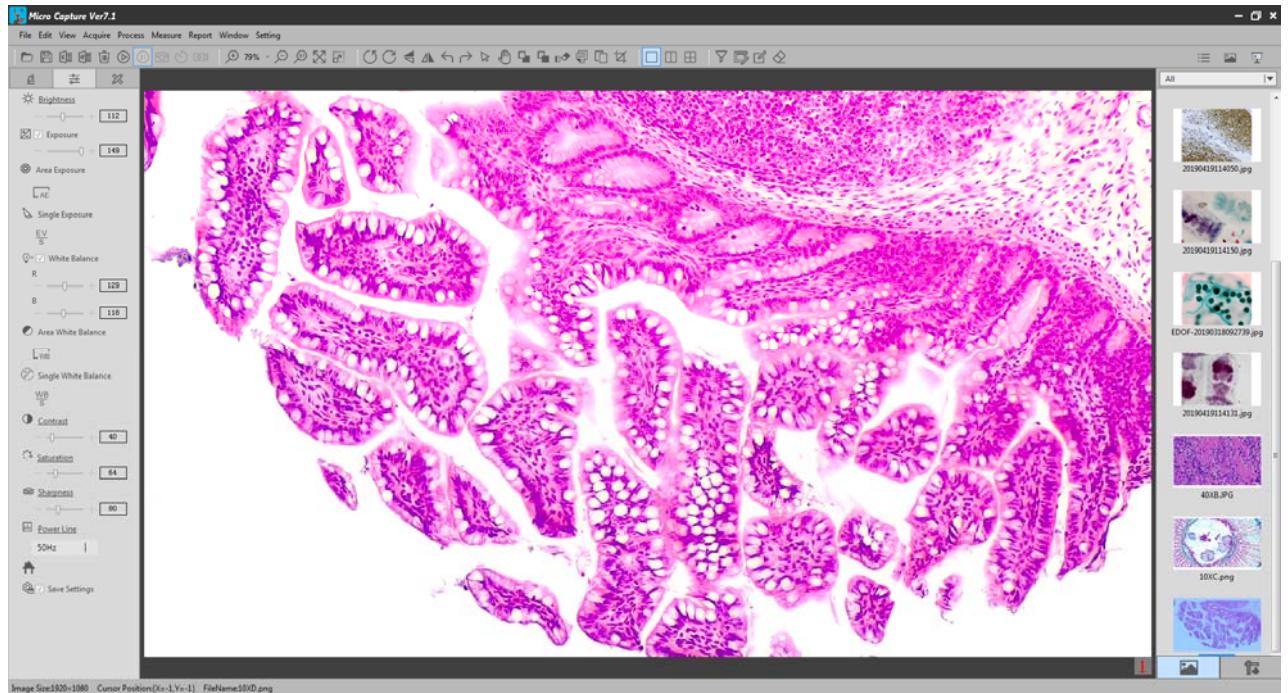
2.2 Manual Panel



The menu Functions are as follows:





























Chapter 3: Function Introduction
















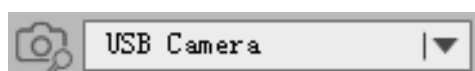
3.1 Shortcut toolbar



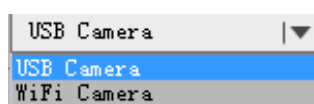
	Open Image	:	Open the image from disk.
	Save the image	:	Save the image to disk.
	Export to Excel	:	Export the images to the Excel
	Export to Word	:	Export the image to Word
	Delete the image	:	Deletes the current image from disk.
	Preview	:	Live-view from camera

	Pause	:	Pause live-view from camera
	Take picture	:	Capture image to disk
	Time-lapse snapshot	:	Time-lapse snapshot to disk
	Record	:	Record to disk
	Zoom in	:	Increase magnification
	Zoom out	:	Decrease magnification
	Actual size	:	Display the current image at its actual size
	Adapt to screen size	:	Display the current image adapt to to screen size
	Full screen	:	Display the current image at full screen
	Counterclockwise rotation	:	Rotate the current image 90 degrees counterclockwise.
	Clockwise rotation	:	Rotate the current image 90 degrees clockwise
	Flip	:	Flip the current image
	Mirror	:	Mirror the current image
	Undo	:	Undo the last operation, valid only for the edit operation.
	Redo	:	Redo the last action, valid only for editing
	Select the object	:	Select an object on the screen, only valid for editing objects on the screen
	Drag	:	Drag video screen in preview area
	Flip the object up to one more layer	:	Place the selected object on a higher layer
	Flip the object down to one more layer	:	Place the selected object in the next layer
	Delete the object	:	Delete the selected object

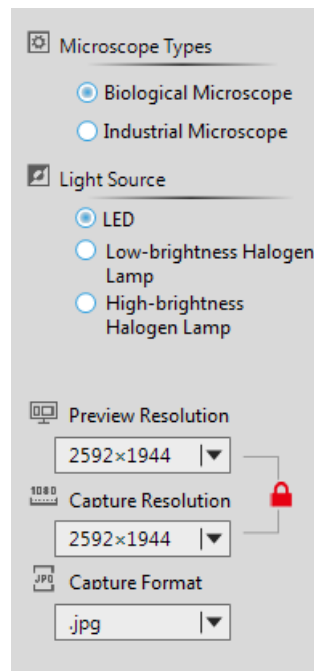
	Duplicate object	:	Copy the selected object
	Paste object	:	Paste an object that has been cut or copied.
	Cut object	:	Cut the selected object
	One screen	:	One screen mode
	Two screens	:	Two screens mode
	Four screens	:	Four screens mode
	Special effects	:	Special effects tools
	Drawing tools	:	Drawing tools
	Annotation tools	:	Annotation tools
	Erase tools	:	Erase tools
	Detailed information	:	The gallery is arranged in detail
	Thumbnail	:	The gallery is arranged in thumbnail
	Slide	:	Display slides



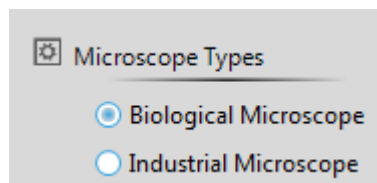
This item displays devices currently in use. When the software searches for multiple video devices, multiple device names can be displayed, and devices can be selected, as shown in the figure



3.2 Working mode



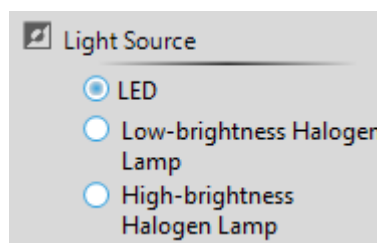
This screenshot shows a settings panel with two main sections. The first section, 'Microscope Types', has a gear icon and two radio buttons: 'Biological Microscope' (selected) and 'Industrial Microscope'. The second section, 'Light Source', has a light bulb icon and three radio buttons: 'LED' (selected), 'Low-brightness Halogen Lamp', and 'High-brightness Halogen Lamp'. Below these are three dropdown menus: 'Preview Resolution' (set to 2592×1944), 'Capture Resolution' (set to 2592×1944), and 'Capture Format' (set to jpg). A red padlock icon is positioned to the right of the 'Capture Resolution' dropdown, indicating it is locked.



This screenshot shows a settings panel with a gear icon and two radio buttons: 'Biological Microscope' (selected) and 'Industrial Microscope'.

Microscope options:

Please select your microscope type for better image display.

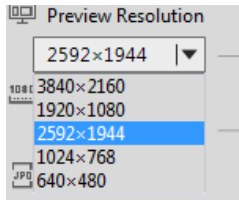


This screenshot shows a settings panel with a light bulb icon and three radio buttons: 'LED' (selected), 'Low-brightness Halogen Lamp', and 'High-brightness Halogen Lamp'.

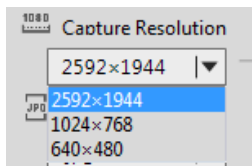
Light source options:

According to the actual situation, select the corresponding light source to get better image display effect.

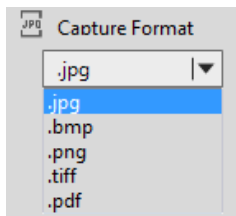
★The above functions are only available for specific models. If there is no display, it means the product does not have this function.




Preview options : You can select any of the preview resolutions in this drop-down box to preview as you wish. Note: the higher the preview resolution, the lower the frame rate. When you preview at 1280×720 or 1920×1080, save only 1280×720 and 1920×1080.



Save resolution : This option is used to select the resolution of the image taken. The preview resolution is in proportion to the saved resolution. When preview resolution ratio is 4:3, save resolution only supports 4:3 resolution selection. The default maximum saving resolution is 2592×1944; When preview resolution is 16:9, save resolution only supports 16:9 resolution scanning, default 16:9 save resolution is 1280×720.



Save image format : There are four save formats: PDF, BMP, JPG and PNG. The default format is JPG. Depending on your requirements, you can choose any of these save formats.

Locked: 

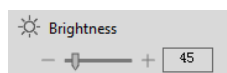
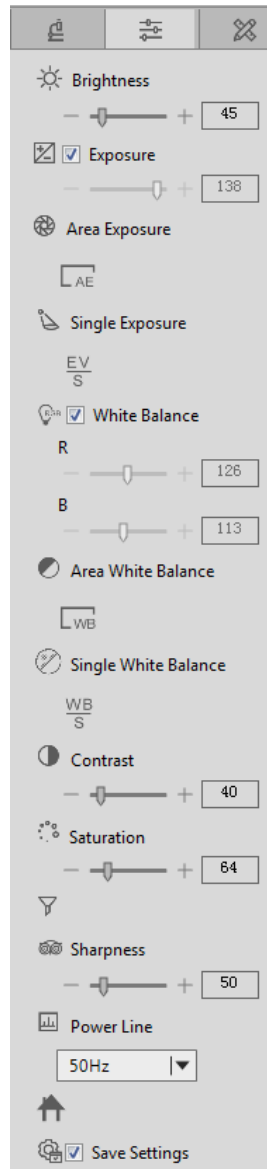
Unlocked: 

Locked and unlocked : When it is locked, the preview resolution is consistent with the photo resolution, and the preview screen displays the same as the photo taken. When in the unlocked state, the preview resolution is inconsistent with the photo resolution, and the preview screen may be inconsistent with the photo taken.

3.3 Camera control

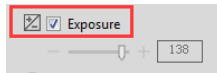
According to your needs, you can adjust the corresponding parameters to achieve the desired preview and image effect.

As shown in the figure:

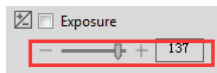


Brightness
adjustment

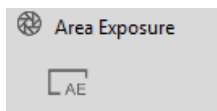
: Manually drag to change the overall brightness of the screen. Often used in conjunction with contrast adjustment to achieve the best results.



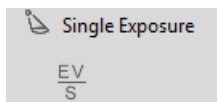
Automatic exposure : When checked, the device will automatically expose according to the environment used. When checked, this option is effective. When not checked, it can be adjusted by "exposure".



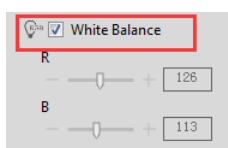
Manual exposure : Drag to adjust the exposure parameters of the device according to the use of the environment. This parameter is adjusted on the basis of automatic exposure. This parameter is only valid if the "automatic exposure" option is not checked.



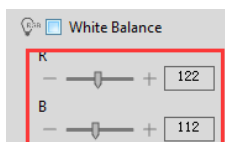
Regional exposure : Select an area as the reference for exposure.



Single exposure : Perform once exposure.

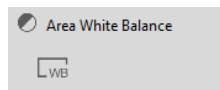


Automatic white balance function : When checked, the device will perform automatic white balance according to the environment used; When not checked, it can be adjusted by "manual white balance" below. Note: abnormal color may occur when taking rich color images. A manual calibration of the automatic white balance is required. To do this, place a white paper on field of view, remove the "automatic white balance" box and check it again. Let the device perform an automatic white balance. When you're done, unchecked the "auto white balance" box.

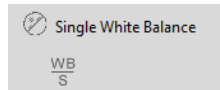


Manual white balance function : Drag to adjust the white balance parameter of the device according to the usage environment. This parameter is adjusted up and down on the basis of automatic white

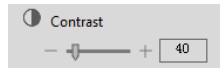
balance. This parameter is only valid if the "automatic white balance" option is not checked.



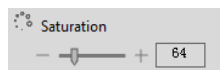
Areal white balance : Select an area as the reference for the white balance.



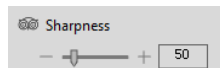
Single white balance : Perform a white balance.



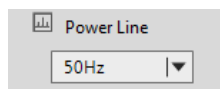
Contrast adjustment function : Manually drag the screen to change the contrast between light and dark, often used in conjunction with brightness adjustment for best results.



Saturation control function : Manually drag to change the color saturation of the image for best results.



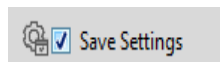
Definition function :



Power line regulation : Note: the power frequency currently supports 50/60hz, please choose according to the national power frequency.



Restore default : Restore to the factory settings

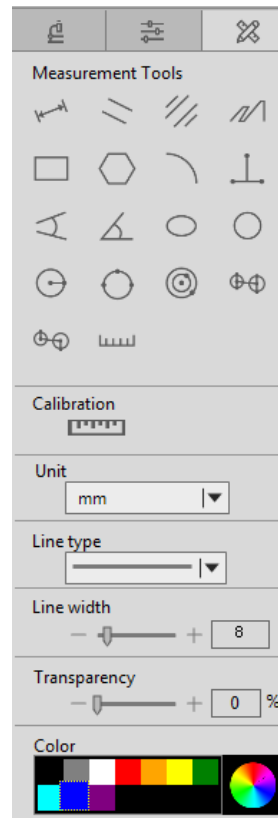







Save parameter : When checked, save the current settings when the device is power-off or the software is turned off.














3.4 Measuring tool

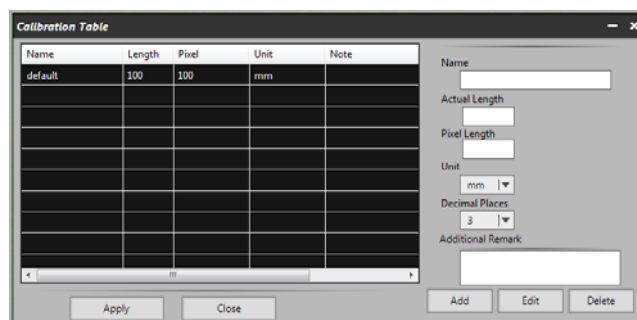
Calibration function and measurement function can accurately measure in editing area.

Note: calibration is the first step for accurate measurement.








	Linear measurement	:	Measure the distance as the crow flies between two points.
	Parallel line measurement	:	Measure the distance between parallel lines.
	Double parallel line measurement	:	Measure the distance between two parallel lines.
	Stitch Measurement	:	Measure the circumference of the stitches.
	Rectangular measurement	:	Measure the circumference and area of a rectangle.

	Polygon measurement	:	Measure the perimeter and area of a polygon.
	Arc measurement	:	Measure the length of the arc.
	Four-angle measurement	:	Four points measure angles.
	Angle measurement	:	Measure angles at three points.
	Oval measurement	:	Measure the radius, circumference, and area of an ellipse.
	Circular measurement	:	Measure the area, circumference, and radius of a circle.
	Circle measurement (circle center, radius to determine the circle)	:	Measure the area, circumference, and radius of a circle.
	Circle measurement (three points to determine the circle)	:	Measure the area, circumference, and radius of a circle.
	Circle measurement	:	Measure the circle tool.
	Circular measurement (concentric radius center distance)	:	Concentric radius center distance measuring tool.
	Circle measurement (three-point circle center distance)	:	Three-point circle center distance measuring tool.
	Scale bar		
	Calibration	:	Set the calibration. Click this function to bring up the calibration Settings window, as shown in the figure

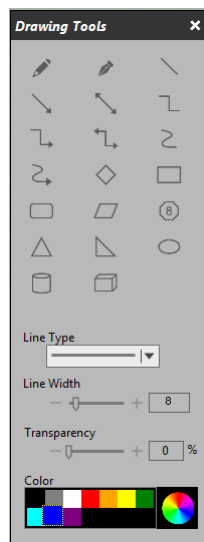


calibration can be set in the window.

	unit	: The measurement display unit of the current preview screen.
	Linetypes	: Sets the drawing line shape. There are five linetypes to choose from.
	Line width	: Sets the pixel value of the width of the drawing line, ranging from 1 to 10 pixels.
	Transparency	: Sets the transparency of the drawn line.
	Color	: Sets the color of the drawn line.

3.5 Drawing Tools

According to the requirements, draw in the editing screen, as shown in the figure:



Pencil






















Pen



Straight Line




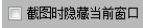






Straight Line with Single Head Arrow

	Straight Line with Double-headed	
	Curve	
	Arrow Curve	
	Broken Line	
	Single Arrow Polyline	
	Double Arrow Polyline	
	Rectangle	
	Rounded Rectangle	
	Parallelogram	
	Rhombus	
	Rhombus	
	Isosceles Triangle	
	Right Triangle	
	Cylinder	
	Cube	
	Line Type	Sets the drawing line shape. There are five linetypes to choose from.
	Line Width	Sets the pixel value of the width of the drawing line, ranging from 1 to 10 pixels.
	Transparency	Sets the opacity of the drawn line.
	Color	Sets the color of the drawn line.

3.6 Annotation Tools

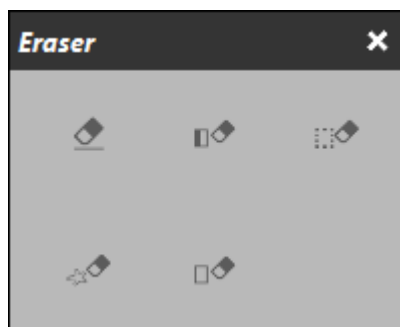





T	Input text.
A	Set font, size, effect.
	Sets the display color of the inserted font.
	Insert picture.
	Take a screenshot to the clipboard and draw the square area to the clipboard.
	When ticked, the screenshot hides the current program, otherwise it displays normally.
	Take a screenshot of any drawn area.
	Take a screenshot of the rectangular area.
	Take a screenshot of the entire window area.
	Take a screenshot of the entire screen area.

3.7 Eraser

Erase the "object" in preview screen

As shown in the figure:



	Erase	:	Erase the objects on screen.
	Rectangular erase	:	Erase the selected rectangle.
	Random Erase	:	Select random objects to erase.



Rrase Objects : Erase the entire selected object.

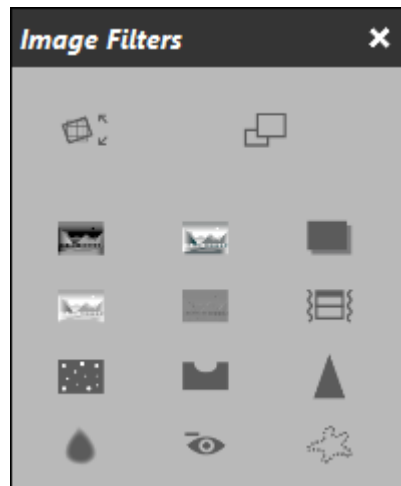


Rrase All : Erase all objects on screen.

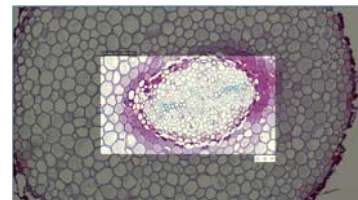
3.8 Image Filters

★Image Filters only available for static images

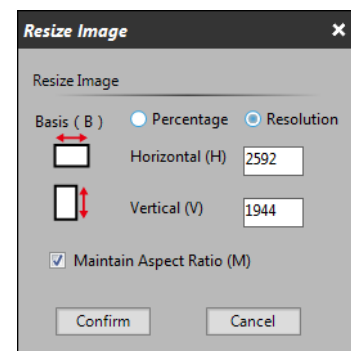
Operate the image in the editing area according to the requirements, as shown in the figure:



Proportional
Crop : Cut images in equal proportions
Click and the window on the right will appear














Resize image : Adjust the size of the image.
Click and the window on the right will appear



Inverted color



Monochrome

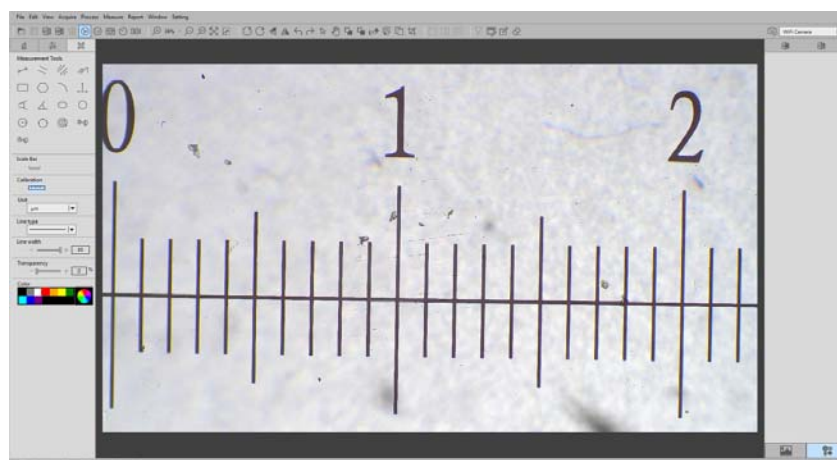
	Greyscale
	Shadow
	Jitter
	Emboss
	Add noise
	Erode
	Soften
	Sharpen
	Red-eye
	magnification
	Contour
	Inflate


3.9 Calibration and Measurement

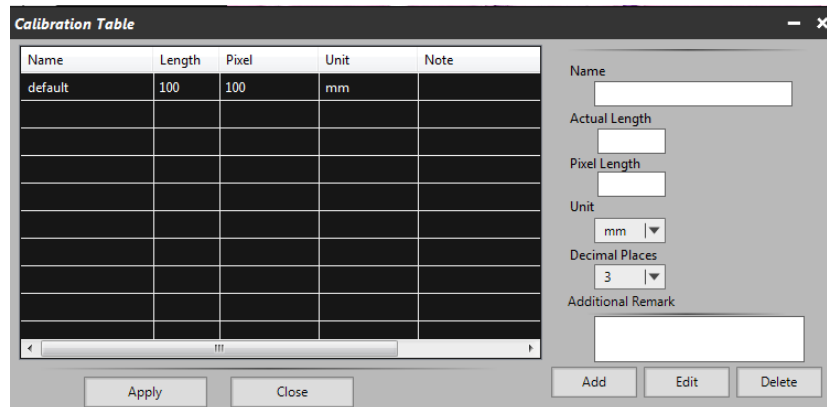
Step 1: Acquire benchmark image.

Place a scale ruler in the field of view. Please use the same conditions (i.e. same objective lens, same camera resolution) as the target observation objects. If a magnification reduction lens is used to measure the target observation objects, then a magnification reduction is also needed to measure the scale bar. This is what we called acquire benchmark image.

As figure follows:

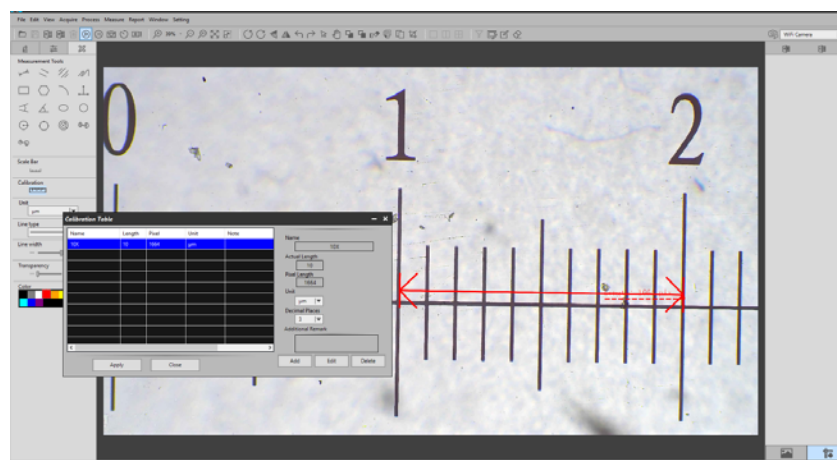


Step 2: Click "Calibration"  in the left measurement tools toolbar, calibration table will shown as below figure.



Step 3: Setting scale ruler .

Draw a straight line on the scale ruler of benchmark image, pixel value will be automatically updated at "pixel length" on calibration table. Shown as below figure :



Calibration Table

Name	Length	Pixel	Unit	Note
10X	10	1664	μm	

Name
10X

Actual Length
10

Pixel Length
1664

Unit
 μm

Decimal Places
3

Additional Remark

AddEditDeleteApplyClose

When drawing the straight line, the longer scale length, the more accurate results. For example, 10 scale lengths accuracy will be better than 1 scale length.

Step 4: Input the actual length and unit of the ruler in the calibration table.As shown in the figure below:

Name

Actual Length

Pixel Length

Unit ▼

Decimal Places ▼

Additional Remark

Step 5: click "Add" to save to the calibration table.

Calibration Table

Name	Length	Pixel	Unit	Note
10X	10	1664	μm	

< >

Name

Actual Length

Pixel Length

Unit

μm ▾

Decimal Places

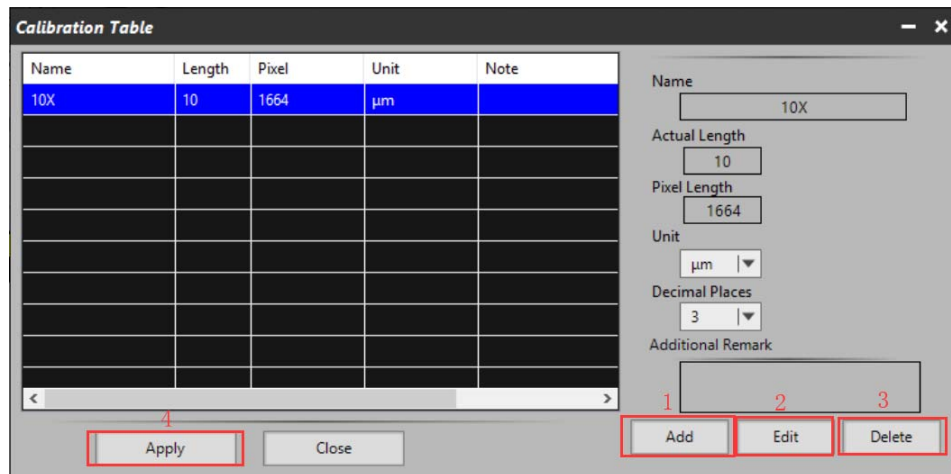
3 ▾

Additional Remark

Add

Edit

Delete

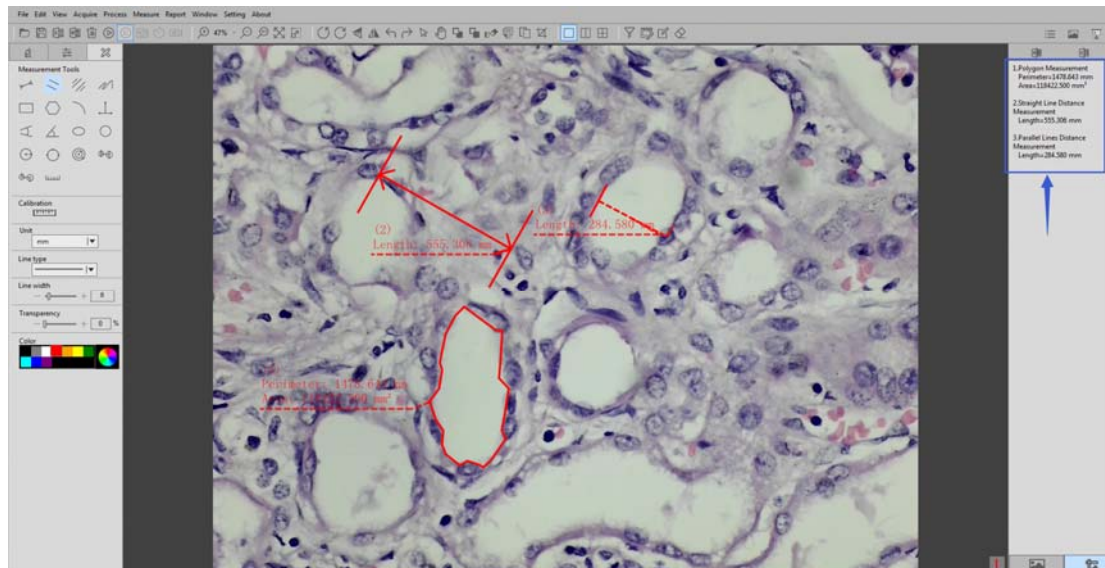


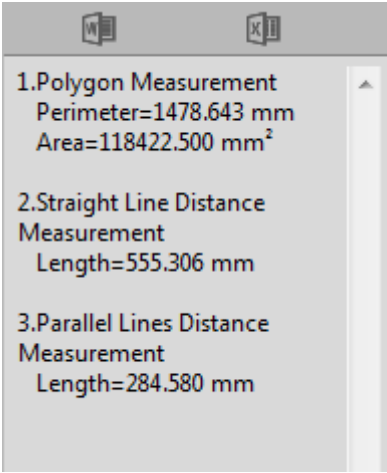
- 1)“Add”: Add the calibration information to the list on the left
- 2)“Edit”: Revise or edit selected calibration item on the left
- 3)“Delete”: Delete selected calibration item on the left
- 4) “Apply”: Activate selected calibration item as benchmark for current image

Step 6: After activating selected calibration item , put the object into the field of view, and click "





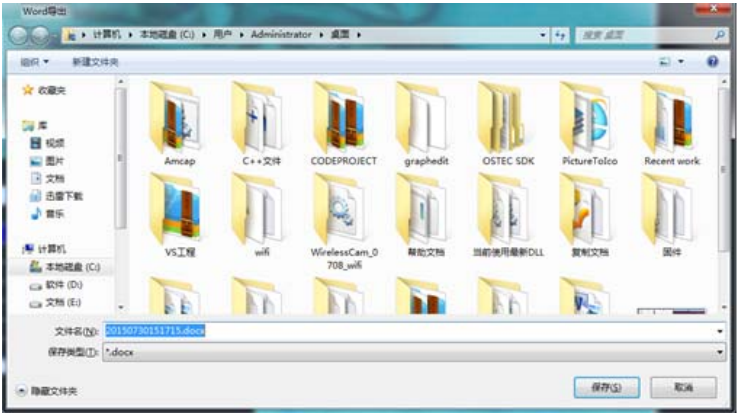
" in the left bar. Select the corresponding measurement tool, and the measurement results will be displayed in the right display area. As shown in the figure below:



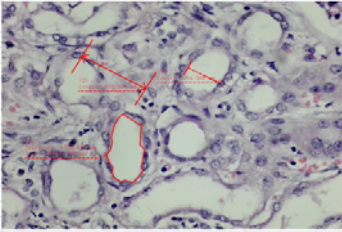


Step 7: Export the measurement results.

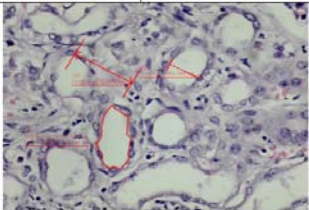
Click   in the display bar on the right to export the data to Word or Excel. Enter the file name and path, and click "save". As shown in the figures below:



Serial No.	Measure item	Measured Value
1	Polygon Measurement	Perimeter=1478.643 mm Area=118422.500 mm ²
2	Straight Line Distance Measurement	Length=555.306 mm
3	Parallel Lines Distance Measurement	Length=284.580 mm

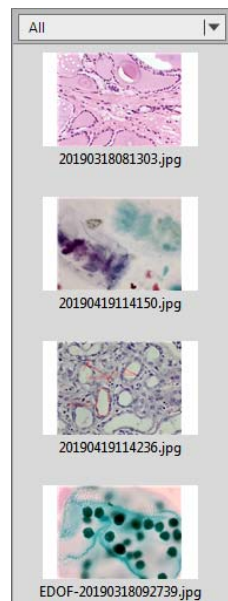


Serial No.	Measure item	Measured Value
1	Polygon Measurement	Perimeter=1478.643 mm Area=118422.500 mm ²
2	Straight Line Distance Measurement	Length=555.306 mm
3	Parallel Lines Distance Measurement	Length=284.580 mm

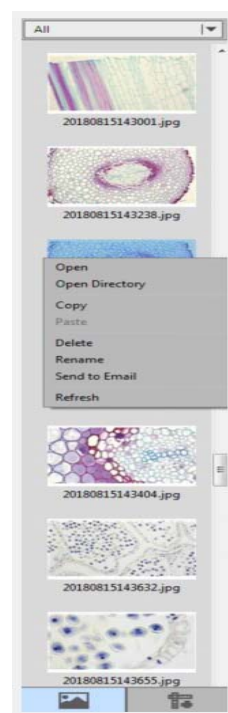


3.10 Thumbnail display area

General status



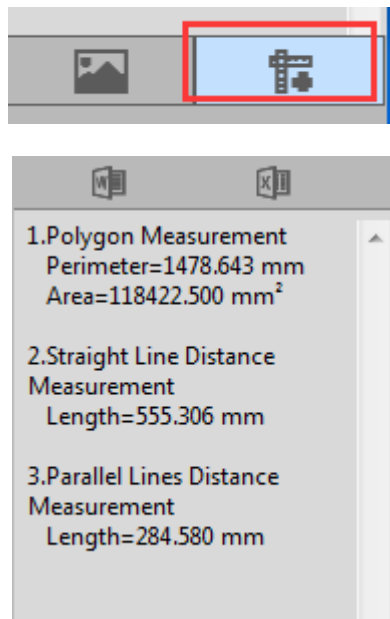
Right click the mouse on the thumbnail



- Open:Open the image in the system default mode
- Open Directory:Open the directory where the selected image is located
- Copy:Copy the currently selected image
- Paste:Paste a copied image (note: only paste in thumbnails)

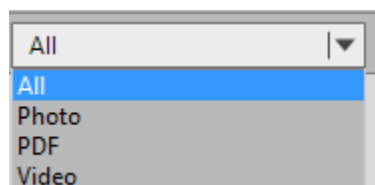
- Delete:Delete the selected image and delete the source file
- Rename:Rename the selected image
- Send to Email:Add the selected image as an attachment to OUTLOOK
- Refresh: Refresh the thumbnail area of the current image

Click the bottom button to switch to display the measurement data



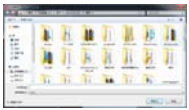



Picture display type

All , Photo, PDF and Video are options.



 Thumbnail : Display pictures and files under the specified path.

	Measurement	:	Display measurement data	
	Export to Word	:	Export the currently displayed measurements to Microsoft Office Word	
	Export to EXCEL	:	Export the currently displayed measurements to Microsoft Office Excel	