KoPa Capture Software

User Manual

Ver8.5

CONTENT

Chapter 1: Software Installation

1.1 Environmental Requirements for Software Installation

Compatible system: Win7(64 bits), Win8(64 bits),Win8.1(64 bits),Win10(64 bits)

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

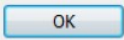Microsoft Word 2003 or later version (for exporting report to WORD)

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

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

Internet Explorer7.0 or version above (for wireless connection to PC)
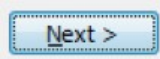
1.2. Installation

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

Step2.Double click the file"KoPa Capture Install" under the disk catalogue. When the following window pops up, please select the installation guide language and press the button" OK ".
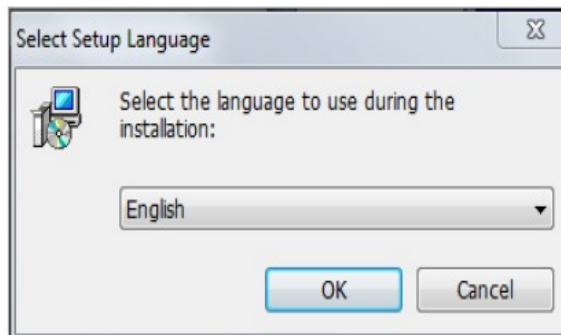

Note: The installation guide language is independent of the software interface language. If you need to change the software interface language, please refer to 2.2 - Modification of Language Function.

Step 3.When the window"Welcome to use KoPa Capture Installation Guide" pops up, please click the

button " Next > ".


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 " Next > " to continue.
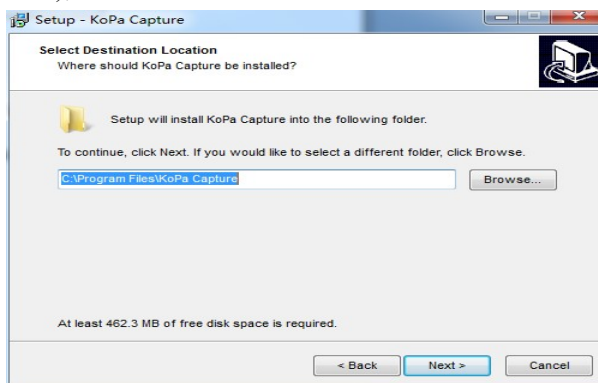
Step 5. When following window appears, select the shortcut you need, and then click the button
Next >
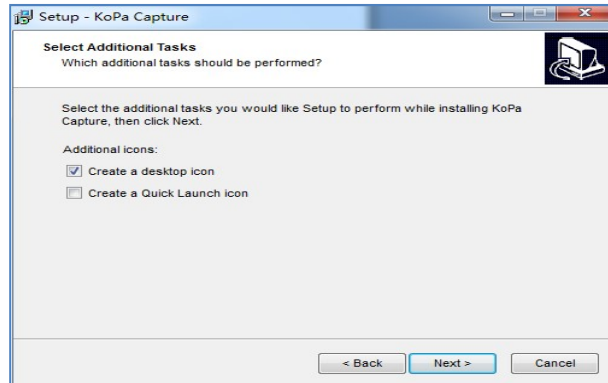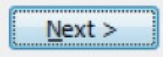
Step 6.Confirm information like "the target location"of software installation. After confirmation, please

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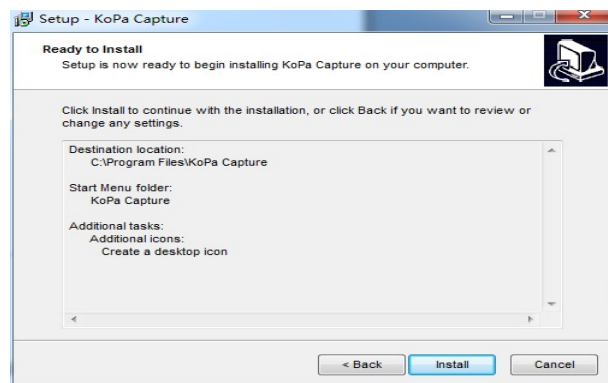
Step 7. An installation progress bar will appear during the software installation procedure. The software
installation necessitates the registration of some runtime libraries, which might be intercepted by some
antivirus software. If such interception pops up, please allow the procedure to continue.

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
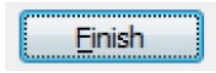
 to complete the installation.After closing the window, check the icon on

your desk. If you fail to find it, please find it from the path "Start"→"All programs".
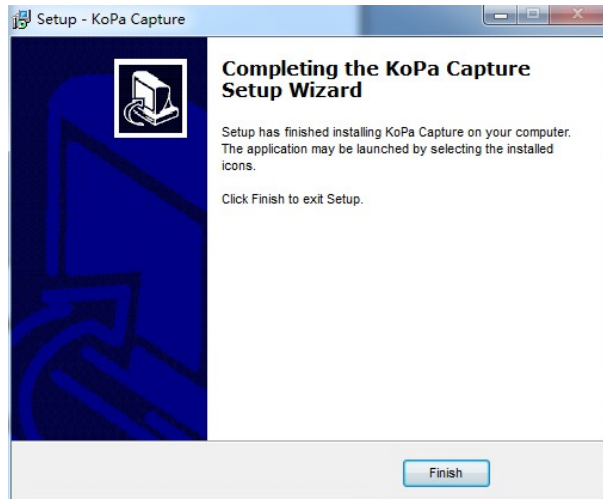
Note：This software supports connecting the camera to PC through wired or wireless way.

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 IEE 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 IEE 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
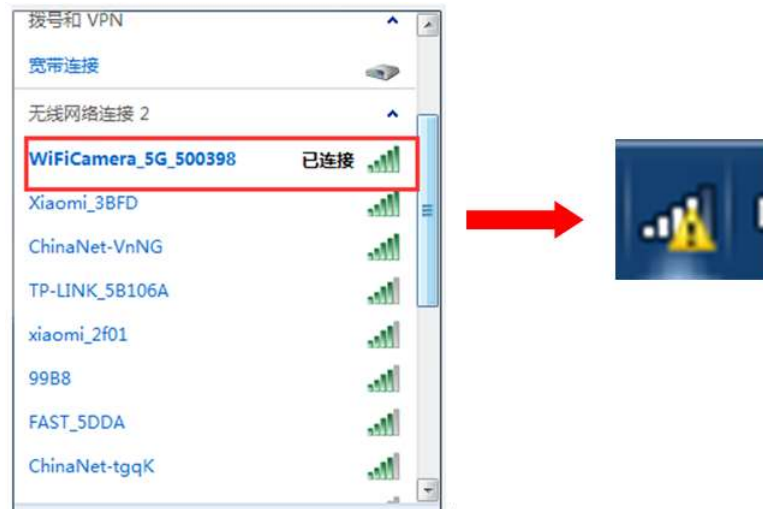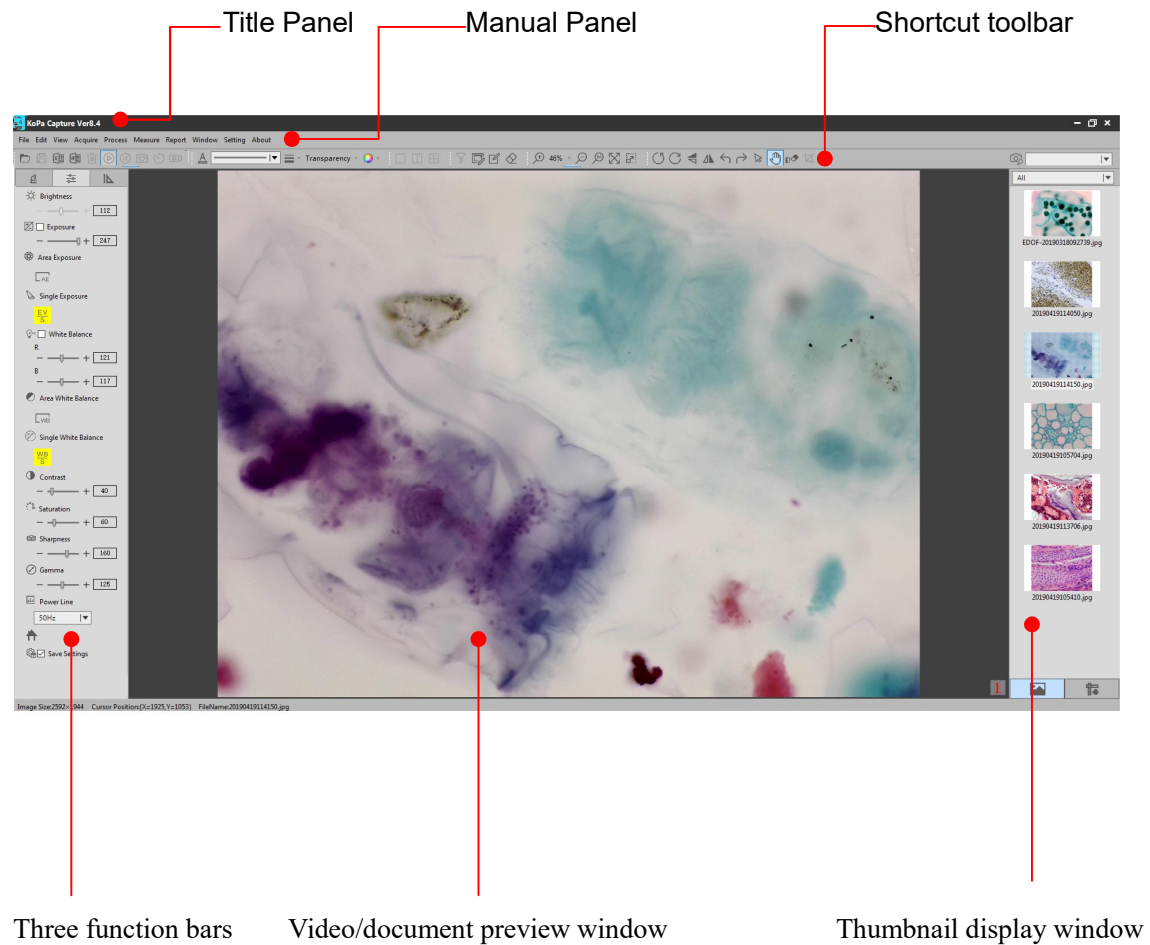

4.Run the software

Select the " " button in the shortcut toolbar, and then select" WiFiCamera "from the"
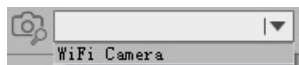
"selection in the upper right corner of the software. Wait a moment for the PC to connect to the WiFi camera.

Chapter 2: Software Instructions

2.1 Software Operation Interface and Instruction

Title Panel   Manual Panel   Shortcut toolbar

Three function bars   Video/document preview window   Thumbnail display window
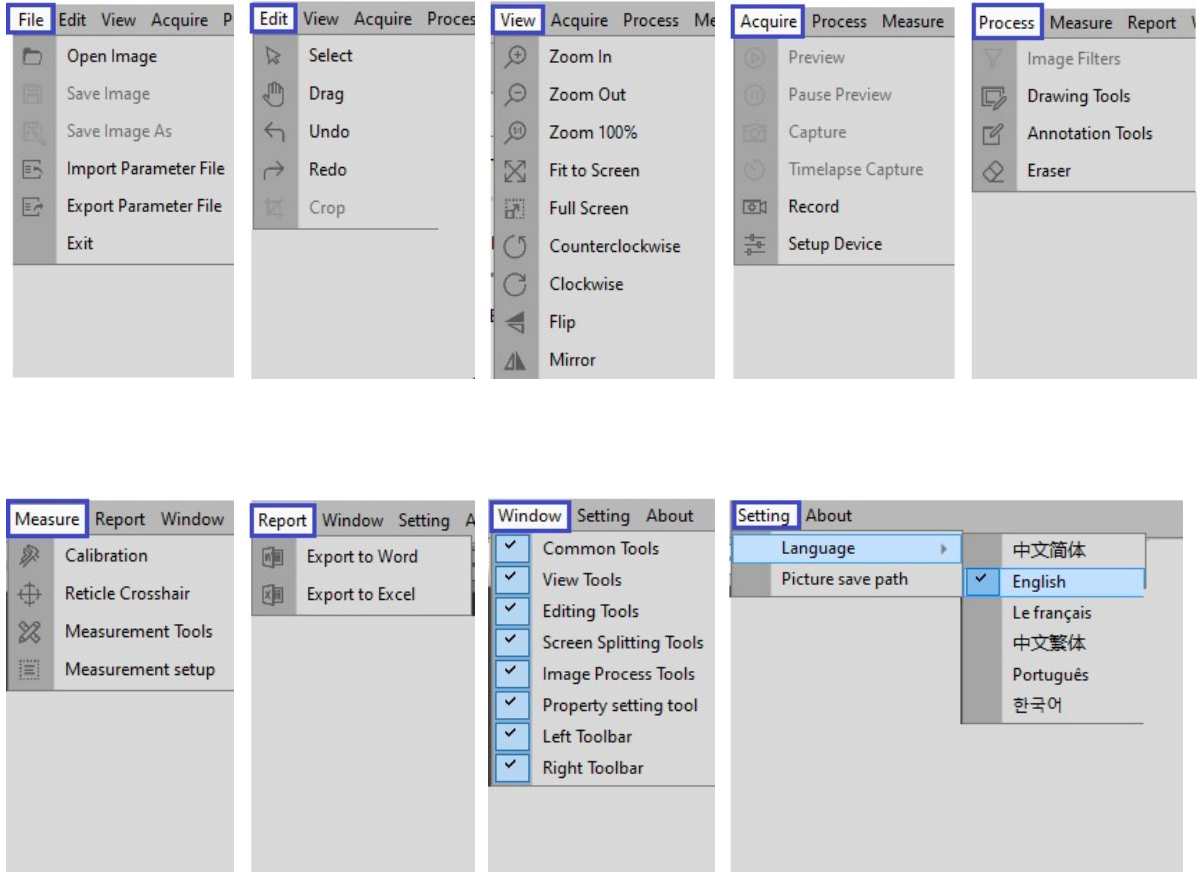
◆   Working mode

◆   Camera control

◆   Measuring tool

2.2 Manual Panel

File Edit View Acquire Process Measure Report Window Setting

**The menu Functions are as follows：**

File Edit View Acquire P
- Open Image
- Save Image
- Save Image As
- Import Parameter File
- Export Parameter File
- Exit

Edit View Acquire Proces
- Select
- Drag
- Undo
- Redo
- Crop

View Acquire Process Me
- Zoom In
- Zoom Out
- Zoom 100%
- Fit to Screen
- Full Screen
- Counterclockwise
- Clockwise
- Flip
- Mirror

Acquire Process Measure
- Preview
- Pause Preview
- Capture
- Timelapse Capture
- Record
- Setup Device

Process Measure Report
- Image Filters
- Drawing Tools
- Annotation Tools
- Eraser

Measure Report Window
- Calibration
- Reticle Crosshair
- Measurement Tools
- Measurement setup

Report Window Setting A
- Export to Word
- Export to Excel

Window Setting About
- ✓ Common Tools
- ✓ View Tools
- ✓ Editing Tools
- ✓ Screen Splitting Tools
- ✓ Image Process Tools
- ✓ Property setting tool
- ✓ Left Toolbar
- ✓ Right Toolbar

Setting About
- Language ▶
- Picture save path

  - 中文简体
  - ✓ English
  - Le français
  - 中文繁体
  - Português
  - 한국어

★**Depth-of-field fusion and image stitching are only available for specific models of products. If there is no display of these functions on the software, it means that the product does not have these two functions.**

The depth-of-field fusion function is to snapshot at least two images and extract the clearest areas of each to fuse into a new image. (The operation interface is shown below)
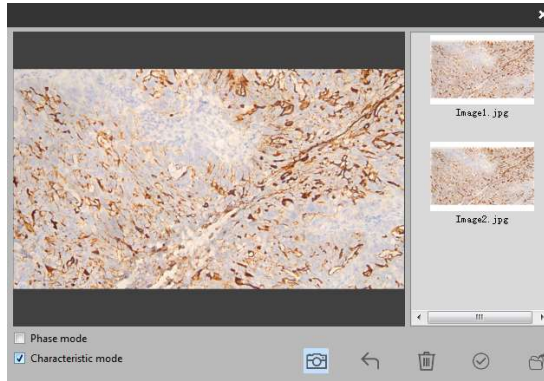
The image stitching function is to snapshot at least two images and find the overlapping areas to stitch the images into a new image. (The operation interface is shown below)
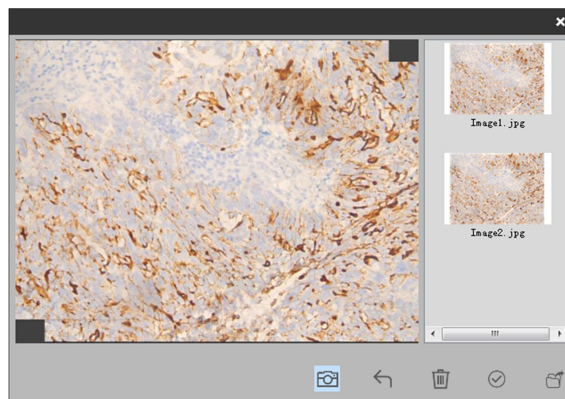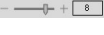
Chapter 3: Function Introduction
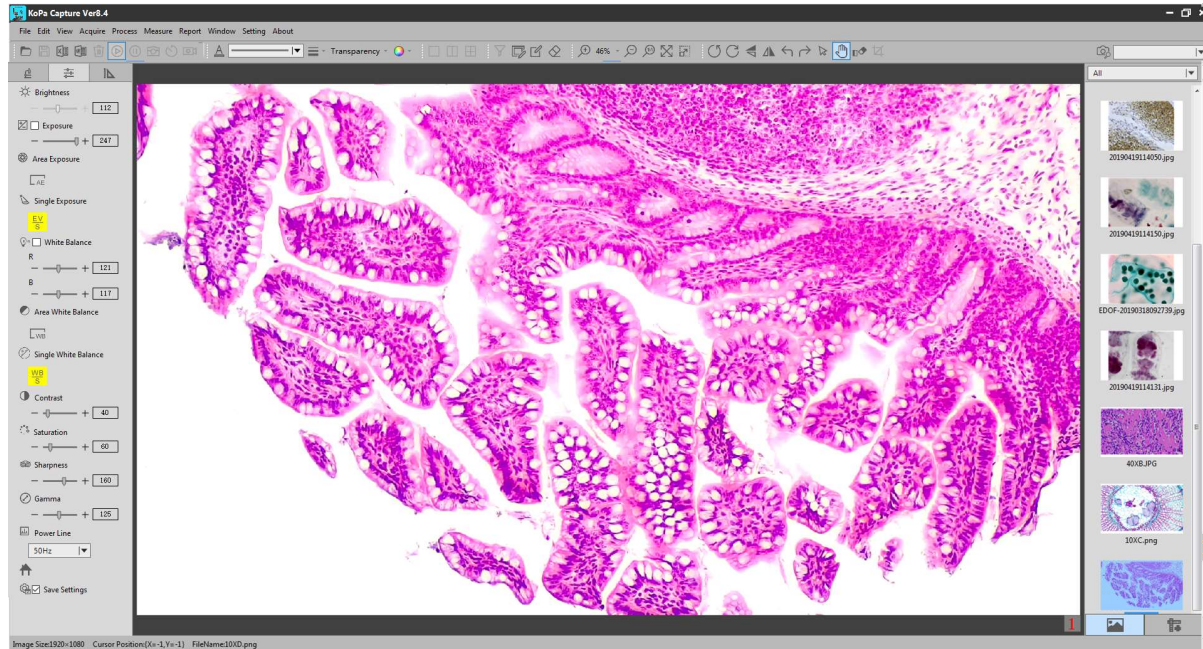
3.1 Shortcut toolbar

📁	Open Image	:	Open the image from disk.	
💾	Save the image	:	Save the image to disk.	
📑	Export to Execl	:	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	
�(II)	Pause	:	Pause live-view from camera	
📷	Take picture	:	Capture image to disk	

|			
⟳	Time-lapse snapshot	:	Time-lapse snapshot to disk
⌖	Record	:	Record to disk
A	Font Settings	:	Set font, size, effect.
▭▾	Line types	:	Sets the drawing line shape. There are five line types to choose from.
≡▾	Line width	:	Sets the pixel value of the width of the drawing line, ranging from 1 to 10 pixels.
− ─╫ + 8			
Transparency ▾	Transparency	:	Sets the transparency of the drawn line.
− ╫ + 0 %			
◉▾	Color	:	Sets the color of the drawn line.
▤▦◉			
▭	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
⊕	Zoom in	:	Increase magnification
⊖	Zoom out	:	Decrease magnification
1:1	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
◻◆	Delete the object	:	Delete the selected object
⛶	Cut object	:	Cut the selected object
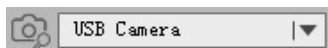
 : This item displays devices currently in use. When the software searches for multiple video devices, multiple device names can be displayed, and devices can be selected, as shown in the

figure
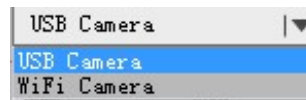
3.2 Working mode
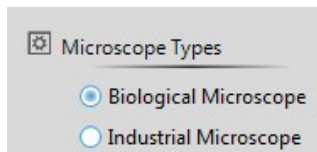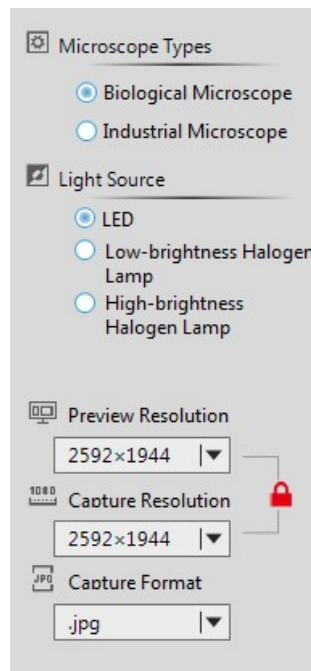
KoPa scope options:

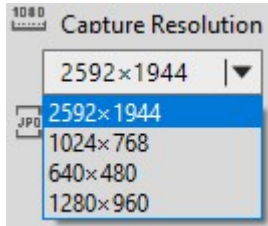Please select your KoPa scope type for better image display.

Light source options:

According to the actual situation, select the corresponding light source to get better image display effect.
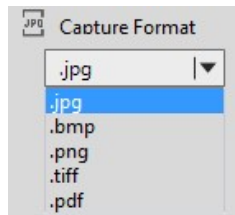
★The above functions are only available for specific models. If there is no display, it means the product does not have this function.
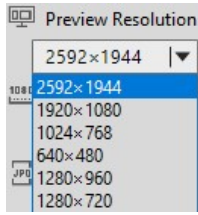
|			
Preview Resolution 2592×1944 ▼ 2592×1944 1920×1080 1024×768 640×480 1280×960 1280×720	Preview options	：	You can select any of the preview resolutions in this drop-down box to preview as you wish.Note: the higher the preview resolution, the lower the frame rate.When you preview at 1280×720 or 1920×1080, save only 1280×720 and 1920×1080.
Capture Resolution 2592×1944 ▼ 2592×1944 1024×768 640×480 1280×960	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.
Capture Format .jpg ▼ .jpg .bmp .png .tiff .pdf	Save image format	：	There are four save formats: jpg, bmp, png, tiff and pdf. 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.

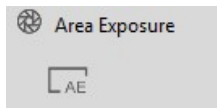As shown in the figure:
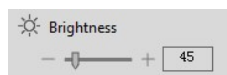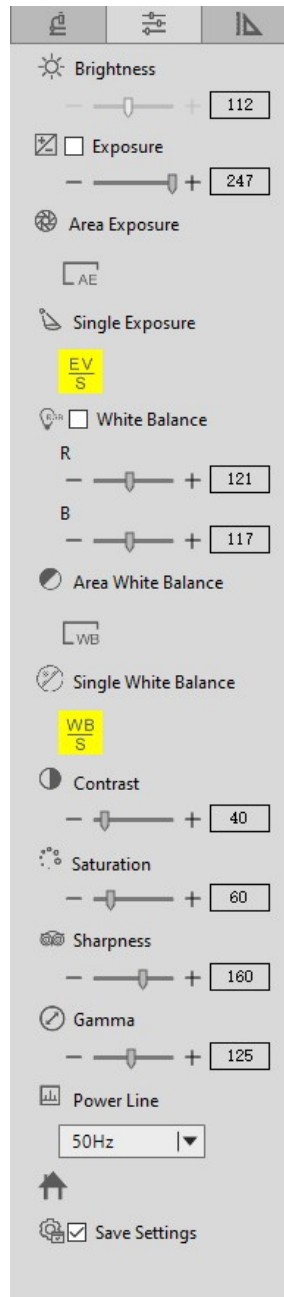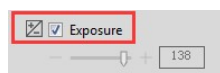
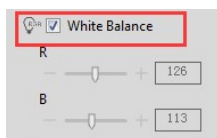|			
	Brightness adjustment	:	Manually drag to change the overall brightness of the screen.Often used in conjunction with contrast adjustment to achieve the best results.
	Automatic exposure	:	When checked, the device will automatically expose according to the environment used. When checked, this option is effective. When not checked, it can be adjusted by "exposure".
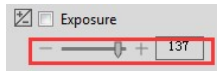
	Manual exposure	:	Drag to adjust the exposure parameters of the device according to the use of the environment. This parameter is adjusted on the basis of automatic exposure. This parameter is only valid if the "automatic exposure" option is not checked.
	Regional exposure	:	Select an area as the reference 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.
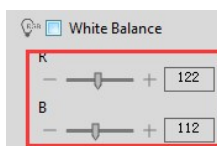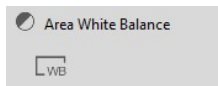
	Areal white balance	:	Select an area as the reference for the white balance.
	Single white balance	:	Perform a white balance.
	Contrast adjustment function	:	Manually drag the screen to change the contrast between light and dark, often used in conjunction with brightness adjustment for best results.
	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.
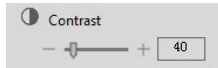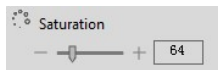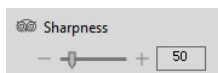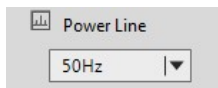
3.4 Measuring tool

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

 Note: calibration is the first step for accurate measurement.
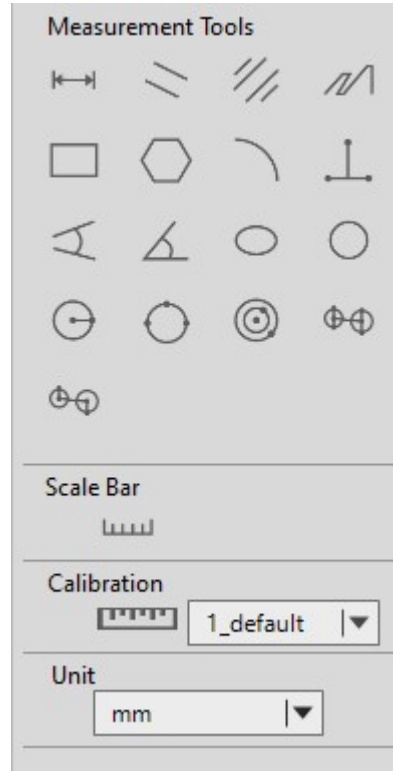
	Linear measurement	:	Measure the distance as the crow flies between two points.
	Parallel line measurement	:	Measure the distance between parallel lines.
	Double parallel line measurement	:	Measure the distance between two parallel lines.
	Stitche Measurement	:	Measure the circumference of the stitches.
	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
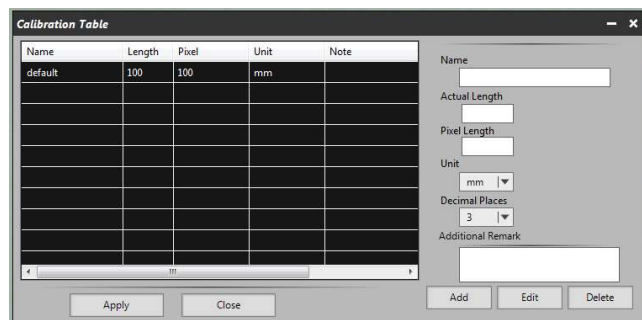
calibration can be set in the window.
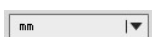
mm ▾	unit	:	The measurement display unit of the current preview screen.

3.5 Drawing Tools

According to the requirements, draw in the editing screen, as shown in the figure:
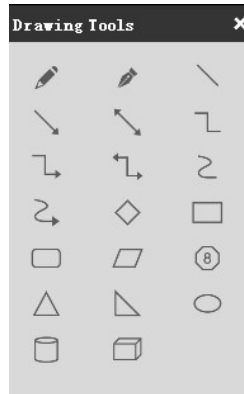
	Pencil
	Pen
	Straight Line
	Straight Line with Single Head Arrow
	Straight Line with Double-headed
	Broken Line
	Single Arrow Polyline
	Single Arrow Polyline
	Curve
	Arrow Curve
	Rhombus
	Rectangle
	Rounded Rectangle
	Parallelogram
	Octagonal

△ Isosceles Triangle

◺ Right Triangle

◯ Ellipse

⬭ Cylinder

⬜ Cube

3.6 Annotation Tools

T	Insert Text
🖼	Insert Image
✂	Send Screenshot to clipboard
☐ Hide software window away during screenshot	Hide software windows away during screenshot.
🖐	Take a screenshot of the rectangular area.
✋	Take a screenshot of the rectangular area.
✋	Take a screenshot of the entire window area.
✋	Print screen

3.7 Eraser

Erase the "object" in preview screen

As shown in the figure:
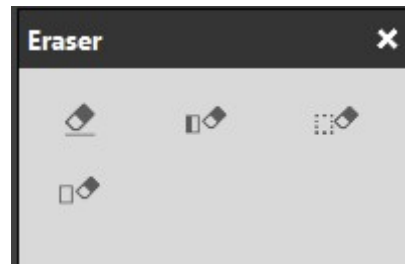
	Erase	:	Erase the objects on screen.
	Rrase Objects	:	Erase the entire selected object.
	Rectangular erase	:	Erase the selected rectangle.
	Rrase All	:	Erase all objects on screen.

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:
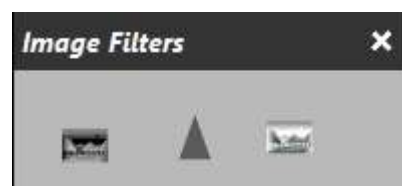
 Inverted color

 Monochrome

 Sharpen

3.9 Calibration and Measurement

Step 1: Acquire benchmark image.

Place a scale ruler in the filed of view. Please use the same conditions (i.e. same objective lens, same camera resolution) as the target observation ojects.If a magnification reduction lens is used to measure the target observation ojects, then a magnification reduction is also needed to measure the scale bar. This is what we called acquire benchmark image.
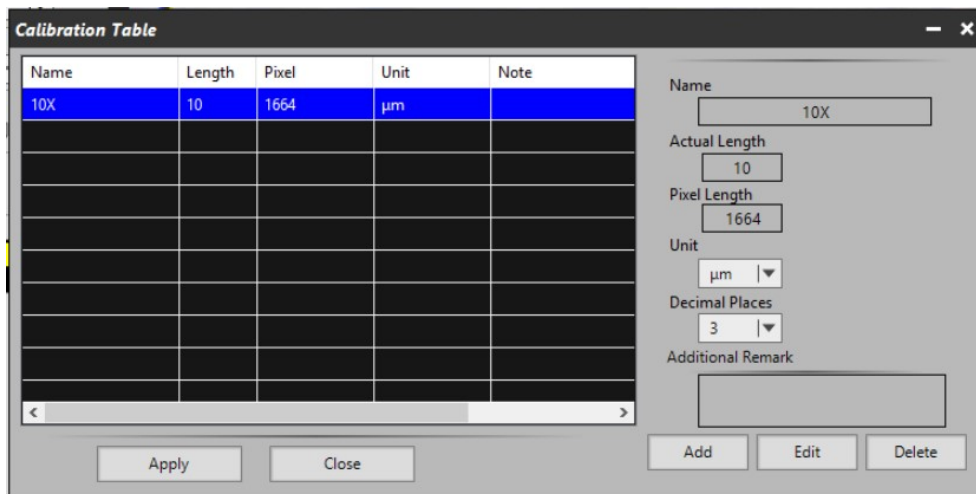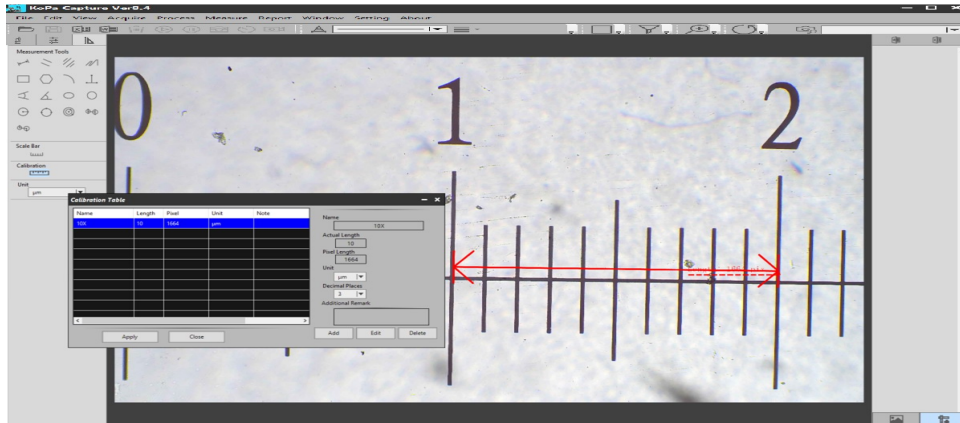
As figure follows:
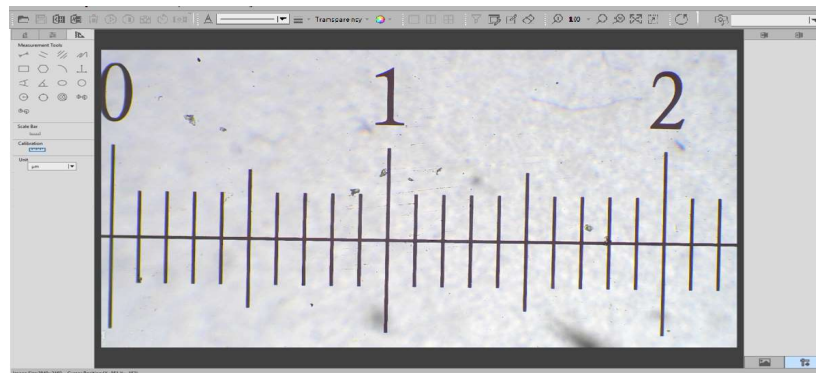
Step 2: Click "Calibration" in the left measuremtn tools toolbar, calibration table will   shown as below figure.
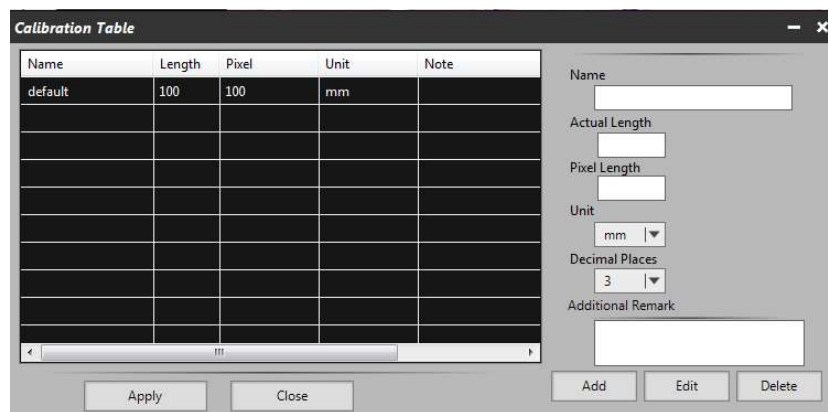

Step 3: Setting scale ruler .

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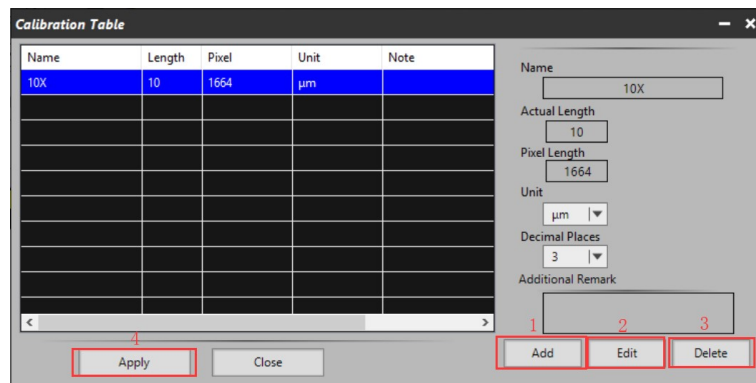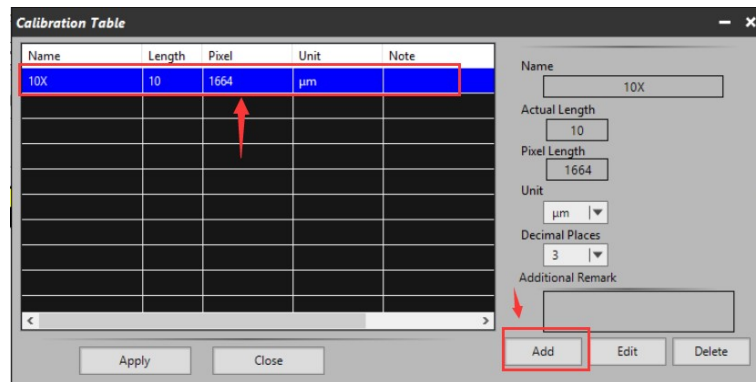
When drawing the straight line, the longer scale length,the more accurate results. For example, 10 scale lengths accuracy will be better than 1 scale length.

Step 4: Input the actual length and unit of the ruler in the calibration table.As shown in the figure below:
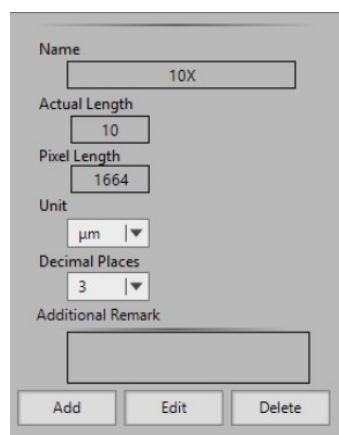
Step 5: click "Add" to save to the calibration table.

1)"Add": Add the calibraion 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 "
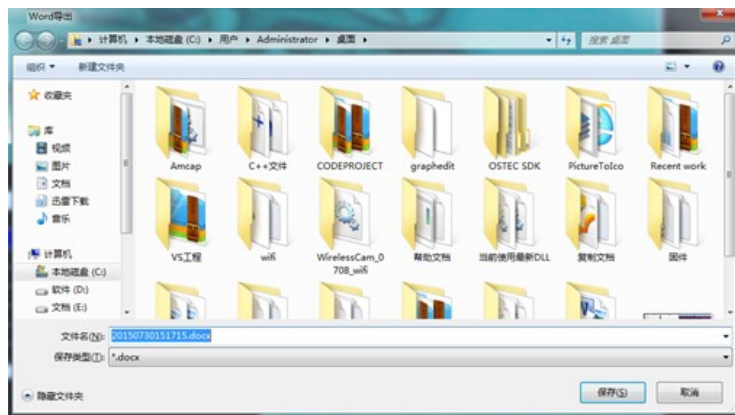
" in the left bar.Select the corresponding measurement tool, and the measurement results will be

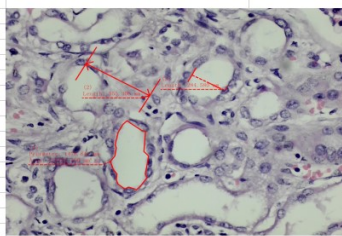displayed in the right display area. As shown in the figure below:
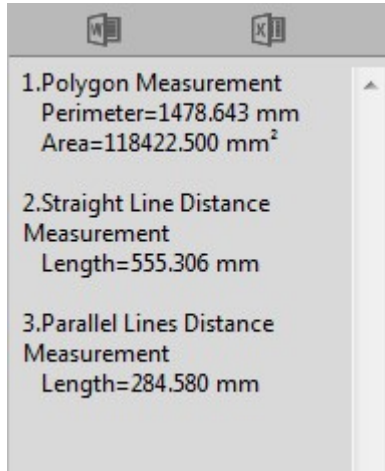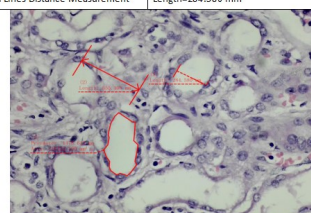
Step 7: Export the measurement results.

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:

3.10 Thumbnail display area

General status
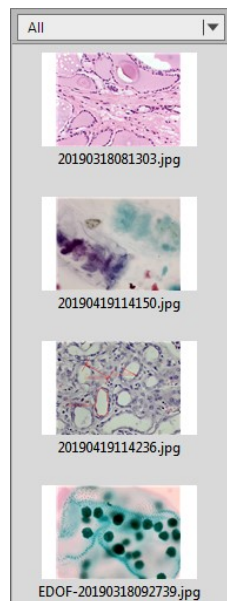
Right click the mouse on the thumbnail

- Open:Open the image in the system default mode

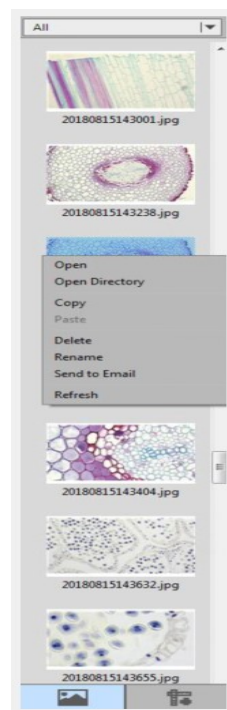- Open Directory:Open the directory where the selected image is located

- 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
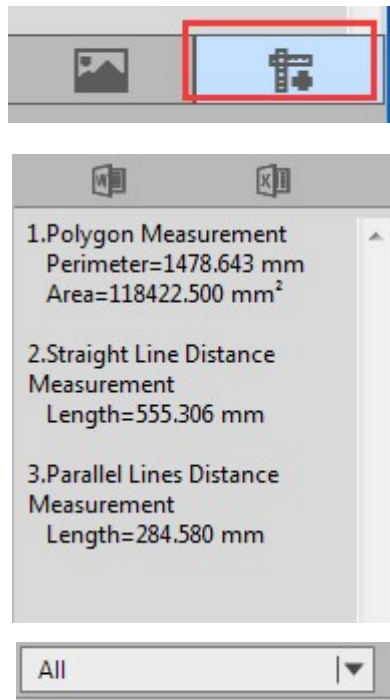
Picture display type

All , Photo, PDF and Video are options.
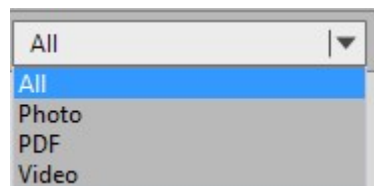
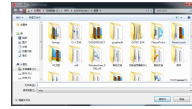|				
	Thumbnail	:	Display pictures and files under the specified path.	
	Measurement data	:	Display measurement data	

| | Export to Word | : | Export the currently displayed measurements to Microsoft Office Word | |

| | Export to EXCEL | : | Export the currently displayed measurements to Microsoft Office Excel | |