Mighty Scope v2

User Guide
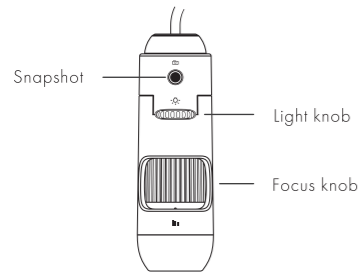
USB Digital Microscope

Item # 26700-218

Tools for Advancing Innovation™
www.aventools.com

---

1 Install Software

1. Plug the USB connector into the pc USB port.
2. Visit AvenTools.com/software-downloads and select the Windows version of the Mighty Scope software
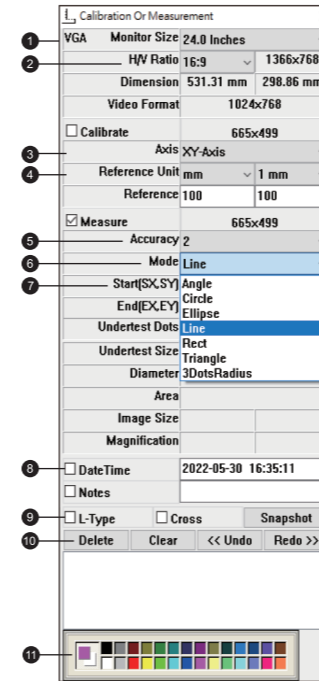3. Install the software by the Setup instructions.

2 Software Application

1. Double click the software icon on your desktop.
*Note 1 : Be sure to connect the Digital Microscope USB cable to the USB port.
*Note 2 : Key in the Windows Serial Number shown in this manual
*Note 3 : TV card Configuration" window will show up at the first time, click"OK"button and double click the software again.

Function keys

Live zone

Photo/Movie List bar

---

11 Use Microsoft DirectShow AVI Splitter. Mark this box.

12 In some computers with an Intel chip, the live zone displays an abnormal image. Mark this box to solve this problem.

13 Save the picture with maximum resolution of 2592x1944 (5-Mega).

14 If you check this box, setup the MicroView Plus APP is always restart.

15 Solve the VGA compatibility, if the black screen, try different settings.

16 Stasts on full-screen mode automatically.

17 Choose the language.

5 Measurement Function

Calibration Or Measurement

1	VGA	Monitor Size	24.0 Inches	
2		H/V Ratio	16:9	1366x768
		Dimension	531.31 mm	298.86 mm
		Video Format	1024x768	
	Calibrate		665x499	
3		Axis	XY-Axis	
4		Reference Unit	mm	1 mm
		Reference	100	100
	Measure		665x499	
5		Accuracy	2	
6		Mode	Line	
7		Start(SX,SY)	Angle / Circle / Ellipse / Line / Rect / Triangle / 3DotsRadius	
		End(EX,EY)		
		Undertest Dots		
		Undertest Size		
		Diameter		
		Area		
		Image Size		
		Magnification		
8	DateTime		2022-05-30 16:35:11	
	Notes			
9	L-Type	Cross	Snapshot	
10	Delete	Clear	<< Undo	Redo >>

Instructions for the Measurement

1 Select the monitor size
2 Select your monitor' correct

Calibrate
3 Choose the calibration axis
4 The unit of Calibration

Measure
5 The accuracy of measurement
6 Measurement mode
7 Date of the measurement
8 Record the measurement
9 Check the L-type or Cross
10 Supports Date Time and Notes
11 Choose the color of the line and words

---

3 Function Key Lists

ICON	Function Instruction	ICON	Function Instruction
	Preview : Enable the live image of the microscope		File Browser : Open / Close the file browser
	Snapshot : Take a picture		Draw : Input words, draw lines, draw circles, draw freehands
	Record : Record a movie		Measure : Measure lines, circles, angles, rectangles, triangles or radii
	Freeze : Freeze the live image on the screen		Crosshair : Add a crosshair to the live video
	Zoom in / Zoom out : Digital zoom in and zoom out function		Print : Print the saved picture
	Preference : The setup window		Save : Click this button to save as a new file
	Full Screen : The setup window		Delete : Delete files
	Exit : Exit		Compare : Compare images
			Manual : Read the users' manual

4 Draw

Click the Draw button and the following window will appear

ICON	Function Instruction	ICON	Function Instruction
	Cursor for move the window		Input the text
	Draw lines		Free hand drawing
	Draw circles		Draw rectangles
	Delete the last drawing		Delete all drawing

A Components Names and Function

Snapshot
Light knob
Focus knob

B How to Use

1. Install and run the software.
2. Place the camera on or above the object to be viewed.
3. Adjust the focus knob slightly to the left or right and move the microscope up and down until a clear image is obtained.
4. The closer you put the microscope to the object, the higher the magnification. Begin with the focus dial turned all the way to the right and turn slowly to the left until the object comes into focus.
5. If the scope tip is touching the object, continue turning the focus dial to the left until the image comes into focus the second time. A clear focused image can be obtained by adjusting the focus knob as well as changing the distance between the object and the microscope.
6. If the object is too dark or bright, adjust the light knob until you get the preferred brightness.

Please check the Manual in the software for other functions instruction

---

3 Function Key Lists

ICON	Function Instruction	ICON	Function Instruction
	Snapshot : Take a picture		Video Setup : The setup window
	Record : Capture a movie		Video Quality : Change the video Quality
	Compare images		Crosshair : Add a crosshair
	Freeze : Freeze the live image		Manual : Adobe reader is necessary
	Save clipboard : Copy the live image		Delete
	Measure		Horizontal Mirror : live image horizontal mirroring
	Zoom in / Zoom out : Digital zoom in / zoom out		Vertical Mirror : Live image vertical mirroring
			Minimize
	Play : Playback the last video		Full Screen

4 Video Setup

Video Setup

Video
1	Source	01 - USB Camera DMC-1613
2	VideoFormat	1920x1080/1920x1080 MPEG4.FI
3	Video Adjust	Brightness / Contrast / Saturation

File
4	AVI	Time Lapse / Close
5	C:\MicroViewerPlus\MOVIE\MP2000.AVI	
6	BMP	Save as JPEG
	C:\MicroViewerPlus\PICTURE\KS002.BMP	

7	Always On Top	
8	Record On The Fly	
9	Play On The Fly	OK
10	Show Snapshot BMP	
11	Use AVI Splitter	
12	Clip 1024x768	
13	HW Snapshot 2592x1944 (5M)	
14	Restart Program	
15	Video Renderer VMR9	VMR7
16	Full Screen Mode	Icon
17	Language	English

1 Allows a user to choose the image source
2 Supports different resolutions
3 Changes the video values
4 Set up the video saving location and file name
5 Time Lapse" recording
6 Set up the picture saving location and file name
7 The Software is always on the top layer
8 Record the video immediately
9 Plat the latest video immediately
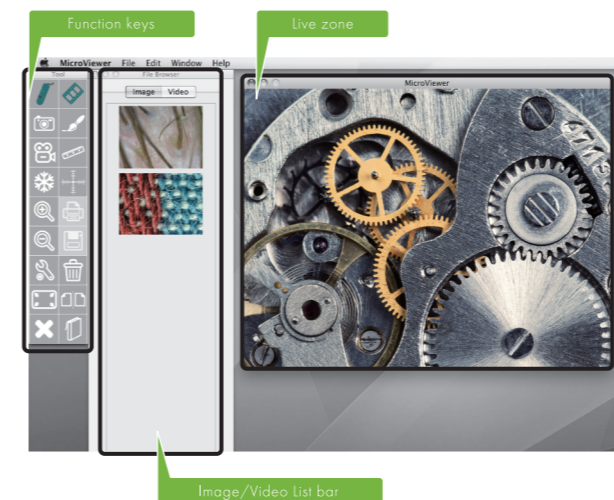10 After snapshot, the preview window will appear

---

1 Install Software

1. Plug the USB connector the PC USB port.
2. Visit AvenTools.com/software-downloads and select the Mac version of the Mighty Scope software

2 Software Application

1. Double click the software icon on your "Applications" folder.
2. Key in the Serial Number in this manual
3. The software window will show up and you will see the live image from the Microscope.
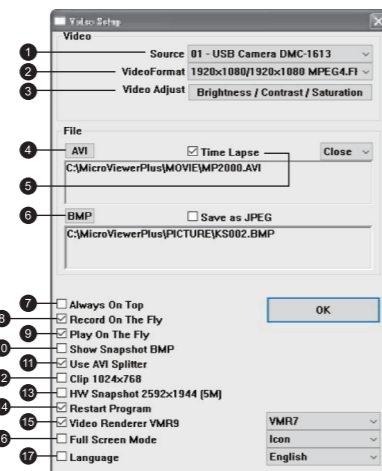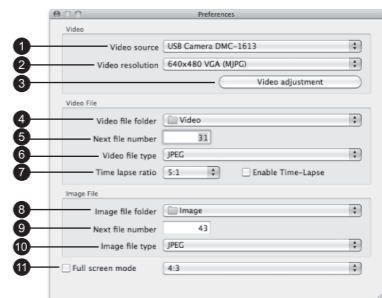
Function keys

Live zone

Image/Video List bar

---

5 Preference

Preferences

Video
1	Video source	USB Camera DMC-1613
2	Video resolution	640x480 VGA (MJPG)
3		Video adjustment

Video File
4	Video file folder	Video
5	Next file number	31
6	Video file type	JPEG
7	Time lapse ratio	5:1 / Enable Time-Lapse

Image File
8	Image file folder	Image
9	Next file number	43
10	Image file type	JPEG
11	Full screen mode	4:3

1 Choose the image source
2 Supports different resolutions
3 Changes the Video values
4 Set up the video saving location
5 Set up the file name of the next video
6 Set up the compression type of video
7 Time-Lapse Recording
8 Set up the picture saving location
9 Set up the file name of the next picture
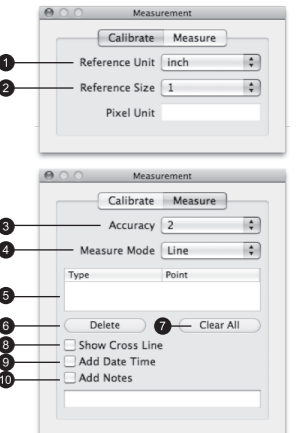10 Set up the compression type of video
11 Starts on full-screen mode

6 Measurement

Measurement

Calibrate
1 Select a unit for calibration and measurement
2 Select the reference size for calibration

1	Reference Unit	inch
2	Reference Size	1
	Pixel Unit	

Measure
3 Measurement accuracy
4 Select a measurement mode : Angle / Circle / Ellipse / Line / Rectangle / Triangle / 3 Dots Radius
5 Data of the measurement
6 Delete the measurement data
7 Delete all measurement data
8 Add the Cross Line
9 Add date times in the image
10 Add notes in the image

3	Accuracy	2
4	Measure Mode	Line
5	Type / Point	
6	Delete	7 Clear All
8	Show Cross Line	
9	Add Date Time	
10	Add Notes	