1080P Full HD WiFi Digital Microscope

(for iOS/Android, PC)

User's Manual

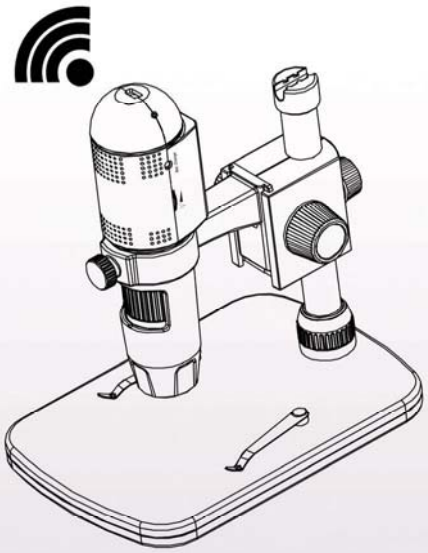


Table of Contents

Precaution……..…….2
Preparation……..…3
- Standard accessories……...…….4
- Parts Names & Functions…….....5
- System requirements……..…….....…6
- Technical Specifications……6

Use on iOS/Android Device by WiFi…….7
- Insert a Micro-SD card…….……7
- Download App……..…….7
- Connect to iOS/Android Device……....8
- Start preview...……..10
- Take a photo……..…11
- Record video…….……11
- Playback……12
- Download files to Smart phone……13
- Delete files……..14
- Settings……15

Install the microscope to Stand...…..…….……16
How to get focus……19
Use the microscope on PC.....…...20
Install Software on PC…….……21
Start Microscope……22
Software functions…….……23
- Capture Photo……..……23
- Capture Video…….……..23

- Timer……..24
Calibration and Measurement…….…...25
- Calibration…….26
- Measurement……29
- Change Calibration……..……..30
- Draw and text……33
Software Interface Instructions……...34
- Main Interface Icons……....34
- Main Menu…….35
- Options…….……..36
- Capture…….…….37
- Measurement Interface Instruction……38
Troubleshooting……..…….39

Welcome

Thank you for your choice of our product - it is a high-tech while easy to use 1080P Full HD WiFi Digital Microscope. With this unit you will see a unique and “bigger” world via iOS/Android devices.

It’s easy to zoom in on stamps, coins, paper currency, plants, insects, skin, fabrics, rocks and minerals, and so much more.

We recommend reading this manual first to get the best out of this unit.

1. Precaution

Before using the WiFi Digital Microscope, please ensure that you read and understand the safety precautions described below. Always ensure that the WiFi Digital Microscope is operated correctly.

- The Microscope is not waterproof, so keep it dry.
- Do not use it in a humid place like bathrooms. A dry environment will maintain its life to maximum.
- Use the Microscope only at -5℃-50℃.
- Sudden temperature change may form dew inside the Microscope like entering a warm room in cold winter. Put it inside a handbag or plastic bag to slow down temperature changes.
- Do not point Microscope lens to the sun or strong light for a long time. Powerful light may hurt the light-sensitive electronics.
- Avoid touching the lens.
- The white LEDs which illuminate the Microscope target field are very bright. Do not stare directly into these LEDs as it may damage your eyes.
- The clear plastic distance shell sometimes picks up dirt or toxic material from a microscopically observed surface. Be careful that this doesn't get in contact with the human skin. Always wash carefully or disinfect as needed.

2. Preparation

■ **Standard accessories**

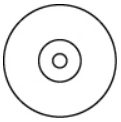
WiFi Microscope

Stand

AC adaptor

USB cable

User manual

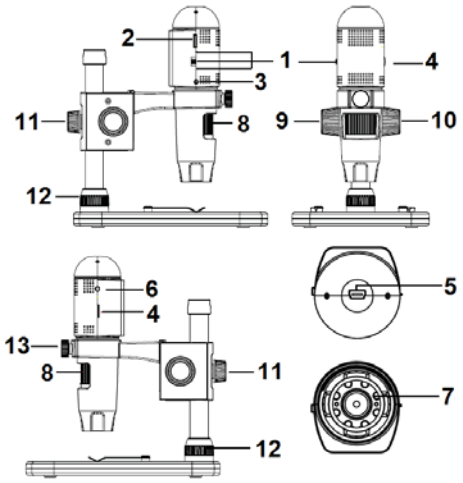


AC adaptor

Calibration Ruler

Cleaning Fabric

■ Parts Names & Functions



Part#	Meaning	Part#	Meaning
1	OFF/WiFi/USB	8	Focus wheel
2	Micro-SD slot	9	Wheel (Fixing the movement)
3	Reset	10	Wheel (for up/down)
4	LED Dimmer	11	Wheel (fixing on the pole)
5	USB (PC and Charge)	12	Wheel (fixing on the stage)
6	Charging indicator	13	Wheel (fixing the microscope)
7	LED		

■ System Requirements

1. iOS/Android

* iOS 5.1 and later
* Android 4.3 and later

2. PC

* Windows XP / VISTA / WIN7 / WIN8 / WIN10
* P4 1.8 or above
* RAM: 512M
* Video Memory: 64M
* USB port: 2.0
* CD-ROM Drive

■ Technical Specifications

Image sensor	3 Mega Pixels (true resolution)
Still capture resolution	3M, 5M, 8M, 12M
Video capture resolution	1920x1080 (1080P), 1280x720 (720P), 640x480 (VGA)
Magnification Ratio	10x~220x
Focus Range	Manual focus from 0mm to 50mm
Video format	H.264
Photo format	JPEG
Light source	6 LED (adjustable by control wheel)
Power source	Rechargeable Li-ion battery Working time: 3hrs, Charging time: 2hrs Charging power: 5V DC
iOS/Android interface	WiFi

App	iOS (5.1 and later): WiFiCapture Search and download from App Store Android: MicroCapture, Install from CD, or search and Download from https://play.google.com/store
PC interface	USB2.0
PC Software	PortableCaptureHD (with measurement)
PC Software Language	English, Deutsch, Spanish, Russian, Italian, French, Portuguese, Dutch, Polish, Japanese, Korean
PC Software OS Supported	Windows XP/Vista/Win7/ Win8/Win10
Size	Microscope: 154mm (L) x 44mm (R) Professional Stand: 165mm(L) x118mm(W)x12mm (H)

3. Use the WiFi Microscope on iOS/Android Device

1) Insert a Micro-SD card

Insert a Micro-SD card (not included) to the card slot!

Please note that the Micro-SD card does not supply hot plug in/out, so please always insert or take out the SD card when the microscope is OFF. If you insert or take out the SD card when the microscope is on, sometimes the microscope will get halted. In such a case, please use a pin to press the Reset button. For detailed operation, please refer to troubleshooting.

2) Download App

iOS:

Search and install MicroCapture from App Store.

Android:

Search MicroCapture from play.google.com/store, download and install it. Or install MicroCapture from the CD that comes with the package.

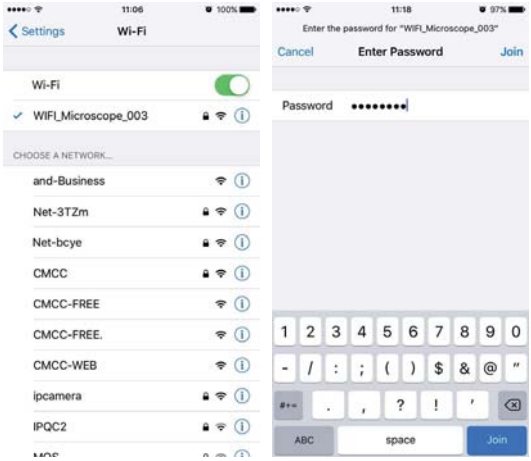
3) Connect the WiFi Microscope to iOS/Android device. (here we take iOS device as an example)

(1) Power on the microscope by sliding the Part#1 to WIFI position;

(2) Turn on the WiFi of your iOS/Android Device, search the WiFi Digital Microscope from the WiFi Device list. The WiFi Microscope name is WIFI Microscope_xxx (xxx is a random number), as follows:

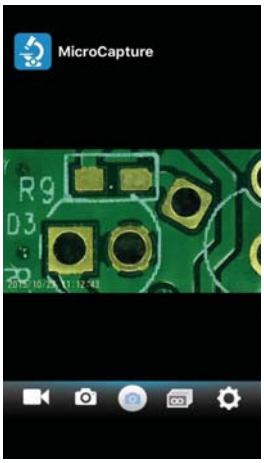
The password to connect the device is **12345678**.

Please refer to **Settings** on how to change the password.



4) Start preview

Start the installed App, live video will show as follows:



5) Take a photo

Click and then a photo will be taken!

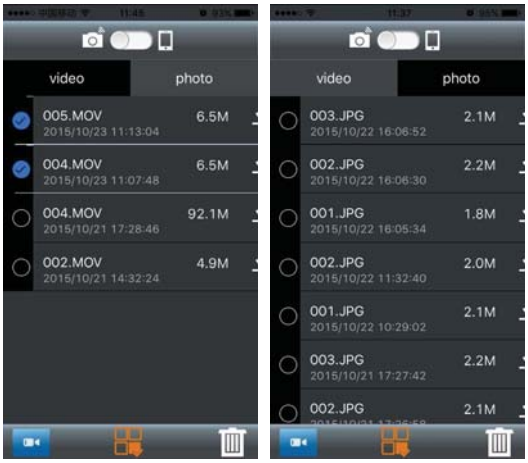
6) Record video

Click and then the central icon will be , then click the red dot, video recording will start, click again to stop the recording.

7) Playback

By default, the captured files are stored in the Micro-SD card in the microscope. You can preview them and download them to your Smart phone.

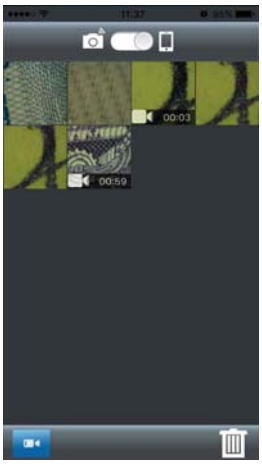
Click to enter playback as follows.



8) Download files to Smart phone

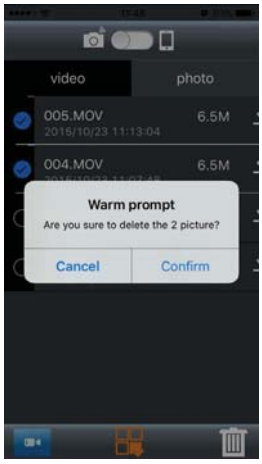
By clicking , you can download file to your Smart phone. You can choose if to download the original file or downsized (fast download).

By sliding the dot to the cell phone icon, you can see files that are already downloaded and stored in your phone.



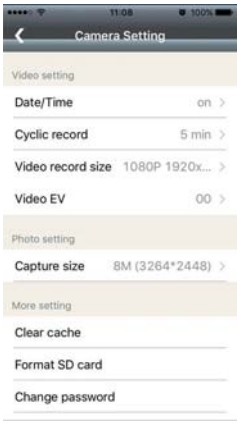
9) Delete files

Click from the bottom bar, tick the files to be deleted, and then click . Finally confirm the delete.



10) Settings

Click , you can enter into setup screen as follows.



Date/Time: turn on/off the date stamp
Cyclic record: turn on/off the cyclic recording.
Video record size: change the video size among 1080P, 720P and VGA
Video EV: adjust the EV
Capture size: change the photo size among3M/5M/8M/12M.
Clear cache: helps to clear history redundancy and keep video frequent.
Format SD: format Micro-SD card
Change password: helps to change WiFi connection password (12345678 by default).
Please see troubleshooting on how to do if you forget your new password.

4. Install the Microscope to the Stand

1) Take the microscope out from gift box gently; put the carriage stage on a flat surface.

2) Follow the below steps:

Put the metal pole through Wheel 12!

Put the metal pole into the female part of the stage!

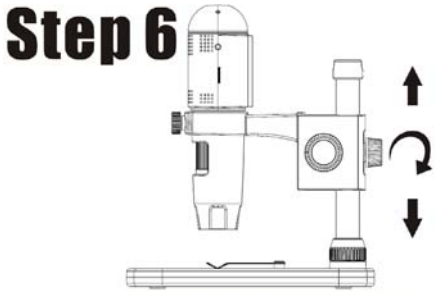
Rotate Wheel 12 to fix the pole on the stage!

Put the microscope into the ring of the stand!

Rotate Wheel 13 clockwise to fix the microscope on the ring.

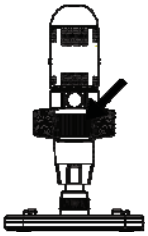
(1) Adjust the upper part of the stand to get a proper height.

(2) Rotate Wheel 9 clockwise to fix the upper part.

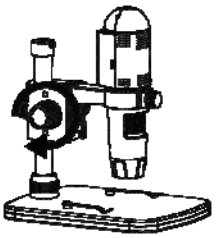


5. How to get focus

Rotate Wheel 10 to get a rough focus!



Rotate Wheel 8 to get a fine focus!



Rotate Wheel 9 to lock or release the movement!

6. Use the Microscope on PC

When connecting to PC, there are two statutes.

1) With Micro-SD card inserted, it is mass storage. You can visit files stored on the Micro-SD card.
2) Without Micro-SD card inserted, it is PC Camera status. You can output live video to computer. Please see Point-7 for how to use the software on PC.

7. Install the Software on PC (Windows)

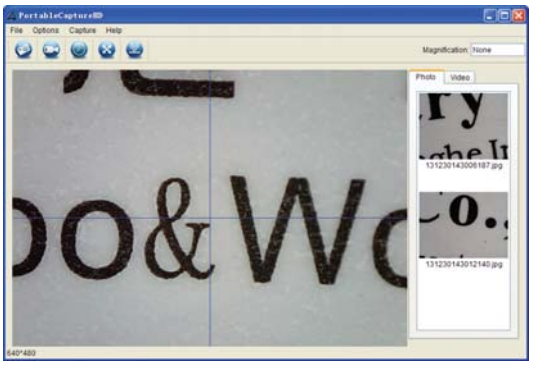
Insert the driver CD into CD-ROM Drive and this will automatically display the following interface:

1) Install MicroCaptureHD
   Click Install **MicroeCaptureHD** and the installation wizard will guide you through the whole process.

2) Full user's manual can be viewed by clicking **User's Manual.**

8. Start Microscope

Take out Micro-SD card, connect your Microscope to your PC USB port, start the software by clicking the icon generated on the desktop after installation and you will see the following screen pop up.



When the Microscope is disconnected from your PC USB port, the following message will pop up.

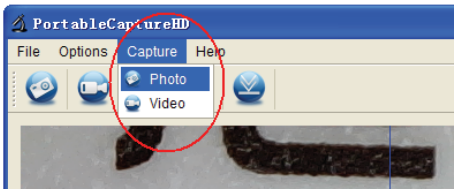
No Device detected, please connect your Microscope directly to your PC USB port.

9. Software Functions

■ Capture Photo

a. Click ‘Photo’ shortcut icon in the main menu bar.

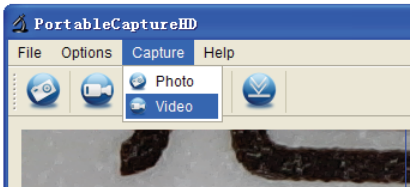
b. Click ‘Capture > Photo’.



■ Capture Video

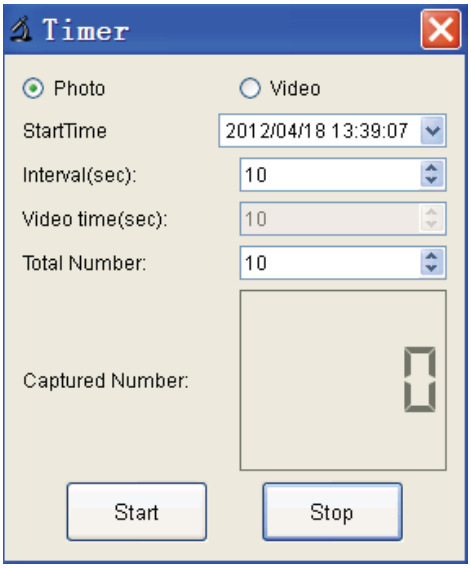
a. Click ‘Video’ shortcut icon in the main menu bar.

b. Click ‘Capture > Video’.



■ **Timer (Photo / Video)**

Click 'Timer' shortcut icon in the main menu bar.



* Under Timer photo, you can set the start time, interval time and total picture number.

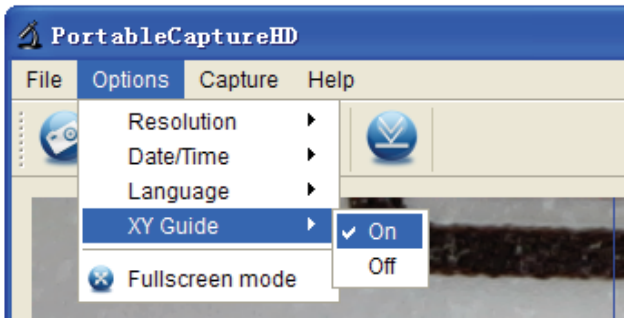
* Under Timer video, you can set the start time, interval time and total video number.

■ Calibration and Measurement

Please make calibration before measurement.

Calibration

Display Crossing from ‘Options>Crossing’’.

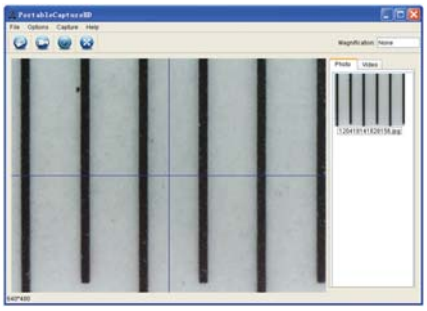


Microscope default at crossing “on”

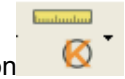
It’s used to check the dial on the calibration ruler.

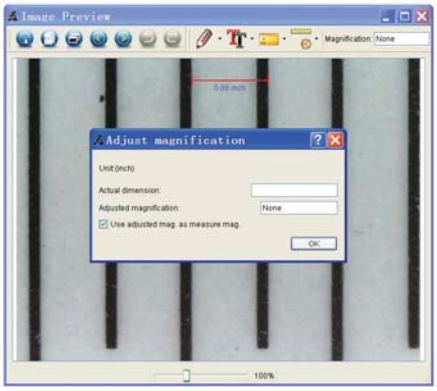
1. Focus microscope on the attached calibration ruler

and then adjust the magnification till the picture is clear. Take a picture for the selected area when the dial is parallel to the crossing as below.



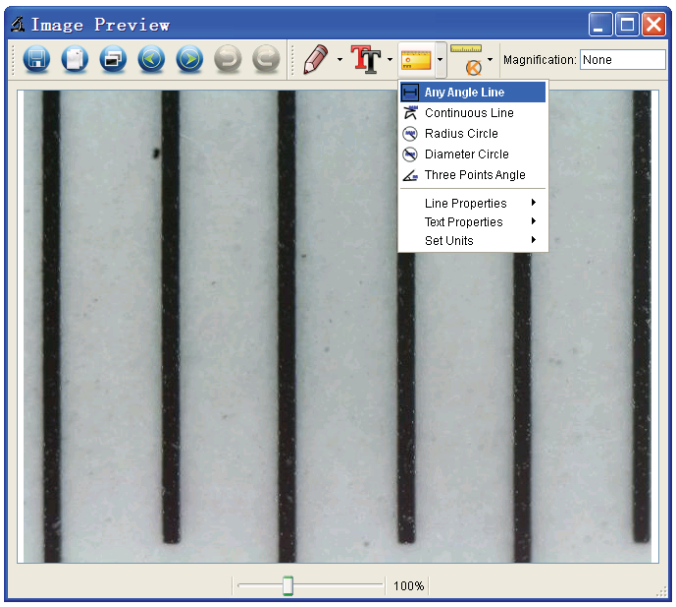
2. Double-click on the picture to enter into measurement interface as below.

3. Click Calibration icon  , and then move mouse to the picture. Click on the beginning and ending points across a known value. Now a dialog will popup as below and you need to enter the exact value of the measurement sample into 'Actual dimension'. Then the software will automatically calibrate the magnification rate. Click 'OK' and the adjusted magnification rate will show in the upper right corner.



* Remark: The measured line should be paralleled.

4. Now you can use ‘Any angle Line’ under Measurement icon to measure the value again. If the value you measure by software is nearly the same as the exact value of the dial means the calibration finish.



Measurement

Double-click on the picture to enter into measurement interface. Under the 'Measurement' icon , you can choose any desired options to measure.

1. Any Angle Line Measurement
Simply click from one point and drag to the next point, and then release the click.

2. Continuous Line Measurement
The Continuous Line measurement allows you to measure any continuous desired length.
Simply click and drag from one point to other desired points, and then release the click.

3. Radius Circle Measurement
Simply click and extend out to the desired radius, the radius, circumference and area of the circle will show up accordingly.

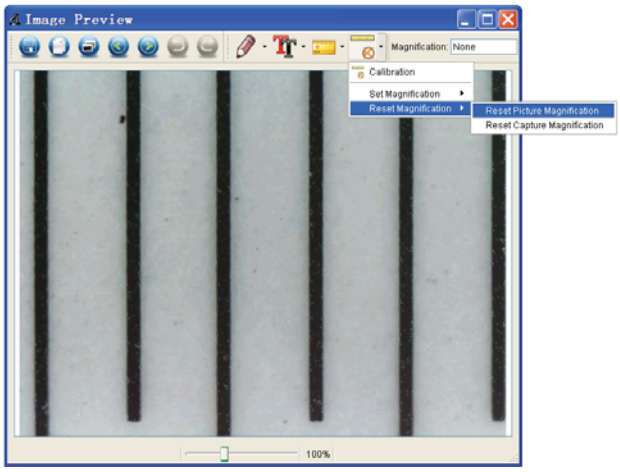
4. Diameter Circle Measurement
Simply click and extend out to the desired diameter, the diameter, circumference and area of the circle will show up accordingly.

5. Three Points Angle Measurement
Simply define any three points angle and click, the angle value will then display.

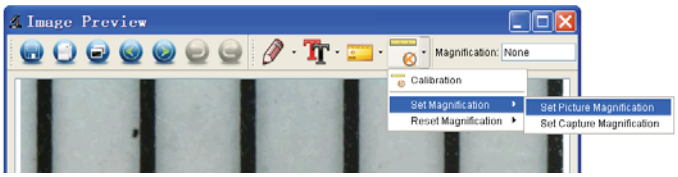
Change Calibration

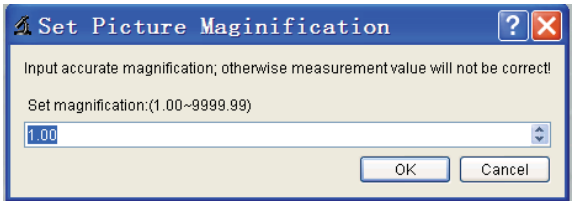
If you need to change the magnification rate and adjust focus to capture picture, please calibrate the magnification rate again.

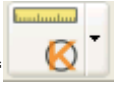
1. Double click to open the picture, Click ‘ > Reset magnification > Reset picture magnification’ as below. And then start calibration again (Calibration details please refer to page37).

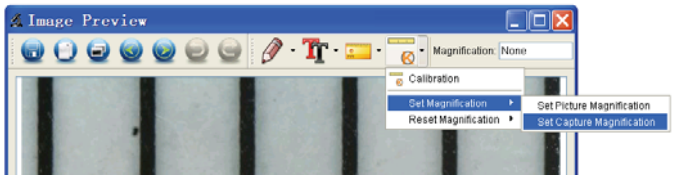


2. Change the magnification rate and capture several pictures, click on the picture to enter into measurement interface. And click ‘ > Set magnification > Set picture magnification’, now a dialog will show up as below; enter the magnification rate into the dialog and click ‘OK’.





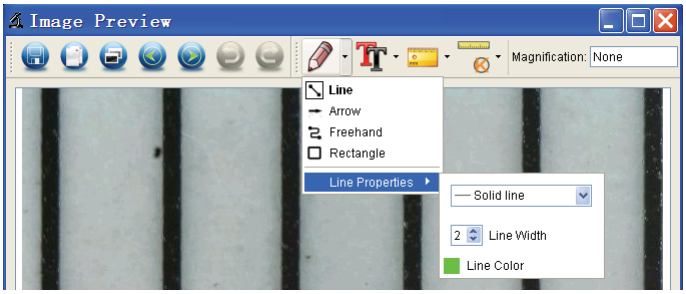
3. If you want to use the same magnification rate to capture pictures, just click ‘  > Set magnification >Set capture magnification’. Now all pictures will use the same magnification rate and you can start measurement directly.



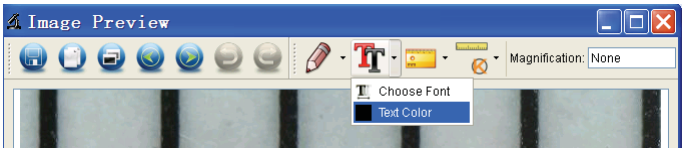
Draw and Text

You can draw or add a text on the picture and save for later analysis.

1. Click icon to choose any kinds of drawing under the pull-down manual as below.



2. Click icon and set the font for the text in the popup dialogue as below.



10. Software Interface Instructions

Main Interface Icons

Capture photo – It's used to capture photo one by one.

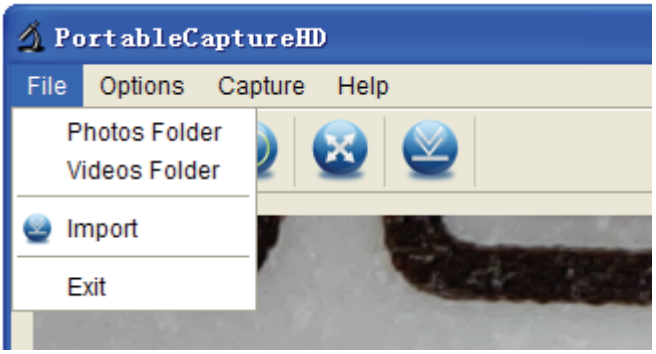
Start / Stop record video.

Timer for photo / video – Set the start time, interval time and total photo/video number.

Full screen mode,
Press ESC or double-click to exit.

Main Menu

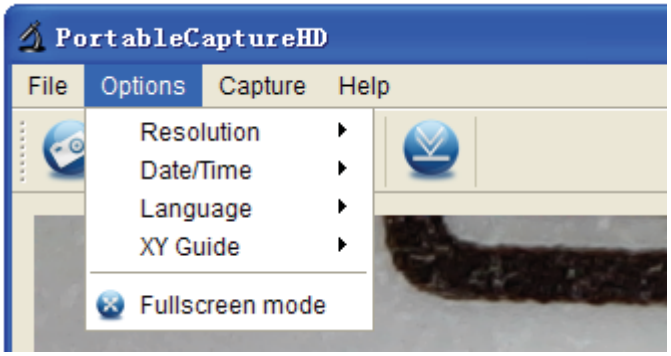
File



Photos Directory: set the directory to store photos taken;

Videos Directory: set the directory to store video taken;

Options



Resolution: change preview size

Date/Time: set to display system date/time on preview window

Language: choose different OSD language

Crossing: display cross on preview window

Full-screen mode: enter into full screen. Click ESC or double click to exit

Capture

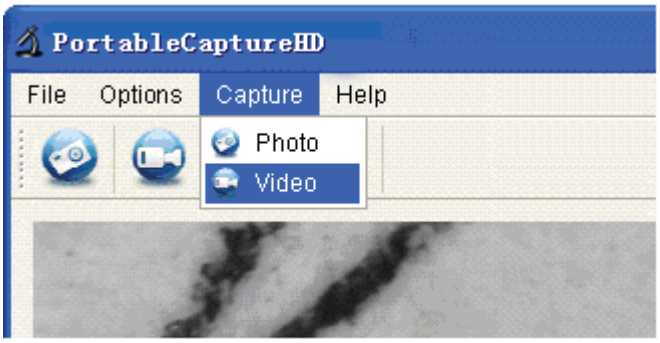


Photo: take a photo

Video: record a video clip

Measurement Interface Instructions

	Save as		Redo
	Copy to clipboard		Draw
	Copy file		Text note
	Previous		Measurement
	Next		Calibration
	Undo		

11. Troubleshooting

Problem	Solution
After switched to WIFI position, the LED does not light.	1). Rotate the LED dimmer to check if it is on. 2). Charge the battery.
The microscope is halted.	When the microscope is on, use a pin to press the Reset button, and then power it on again.
The preview by WiFi is quite slow.	Reset the microscope by using a pin to press the Reset button when the microscope is on and then power it again. Go to app, enter Setting and carry out Clear cache.
I forget my new WIFI connection password.	Create a .txt file named PASSWORDRESET, type YES in the file, and then put the file in a Micro-SD card. Please make sure that it is the only file in the card. Insert the card to microscope and power it on by sliding to WIFI

	position. And then the password will be restored to 12345678.

This symbol on the product or in the instructions means that your electrical and electronic equipment should be disposed at the end of its life separately from your household waste. There are separate collection systems for recycling in the EU.
For more information, please contact the local authority or your retailer where you purchased the product.

FCC INFORMATION

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.