

# USB digital microscope

## windows operating system Instruction



### Introduction

Thank you for your choice of our product - it is a high-tech while easy to use Digital Microscope. With this unit you will see a unique and "bigger" world.

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

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

### Computer System Requirements:

- ◆ Windows 2000/XP/VISTA/WIN7,8&Mac
- ◆ P4 1.8 or above
- ◆ RAM: 256M
- ◆ Video Memory: 32M
- ◆ USB port: 2.0,3.0
- ◆ CD-ROM Drive

### Technical Specifications

Image sensor	1.3 Mega Pixels ,2.0Mega Pixels,5.0Mega Pixels
Focus Range	Manual focus from 10mm to 500mm
Frame Rate	Max 30f/s under 600 Lus Brightness
Magnification Ratio	20X ,50X, 200X,400X,500X,600X.....
Video format	AVI
Photo format	JPEG or BMP
Light source	8 LED (adjustable by control wheel)
PC interface	USB2.0,3.0
Power source	5V DC from USB port
Operation system	5V DC from USB port
Operation system	Windows os Mac os
OSD language	Chinese ,English, German, Spanish, Korean, French, Russian,jaenpese
Bundle software	MRK
weight	90g

## **Install the software and start-up equipment**

1.put the CD into the drive, and then folder to your desktop or other hard drive.  
Click Install the software automatically installed after production into a desktop

icon MKR 

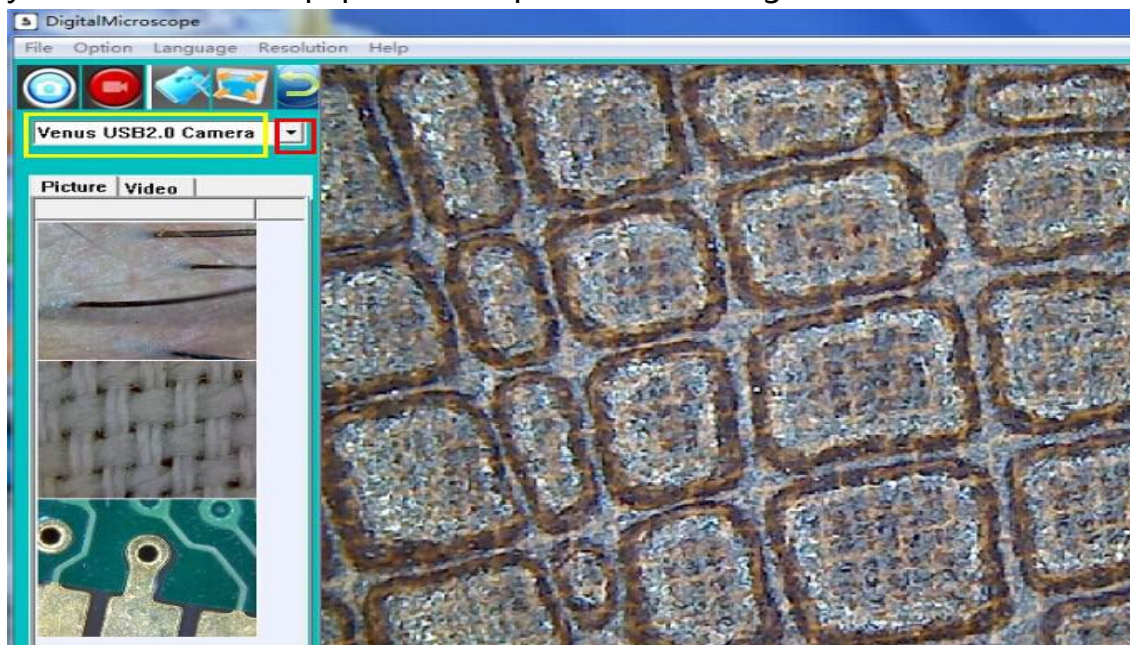
2. the microscope must be connected to the computer, the computer

automatically recognizes installed.

3. after the completion of a microscope connected to a computer, and then

double-click  to enter the video page.

4. use the mouse to click on the video page red box arrow, and then select the yellow box video equipment to open the following screen:



5. When the Microscope is disconnected from your PC USB port, the screen will display "please select video source"

## Language

You can choose On Screen Display language by the following operation:




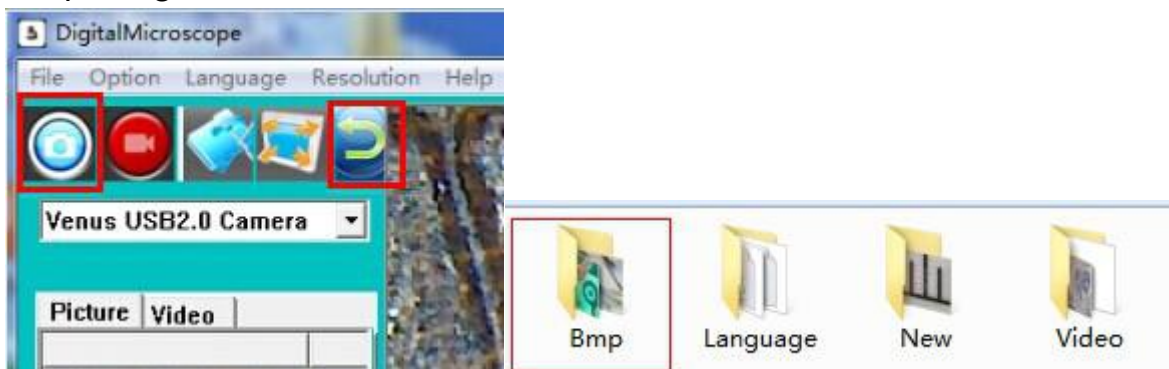
## Full screen

1. You can knock on computer keyboard Enter key, reset
2. Clicking the full screen icon:

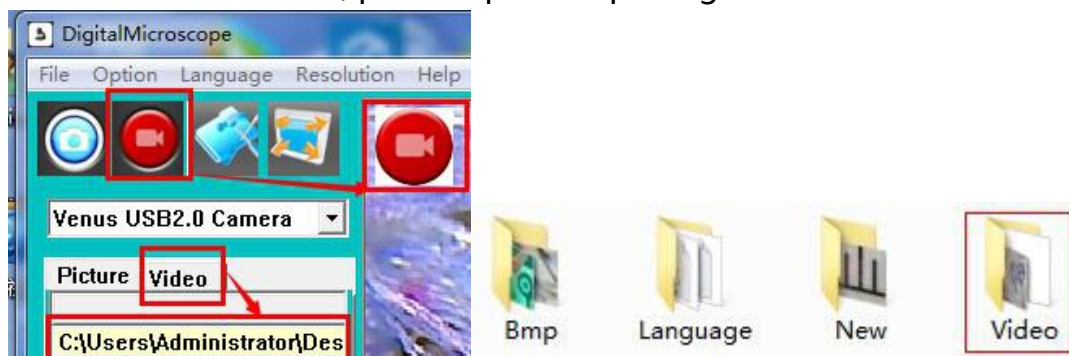


## Capture

- 1, camera: When you focus the image is clear, click the camera icon at the top of the software, then you can take pictures, shoot good photos displayed in the left column, if you feel dissatisfied with the left mouse button on the photo to zoom out. Right-click on the map to delete, or click the back key , open the package MRK, BMP files folder, and delete them.



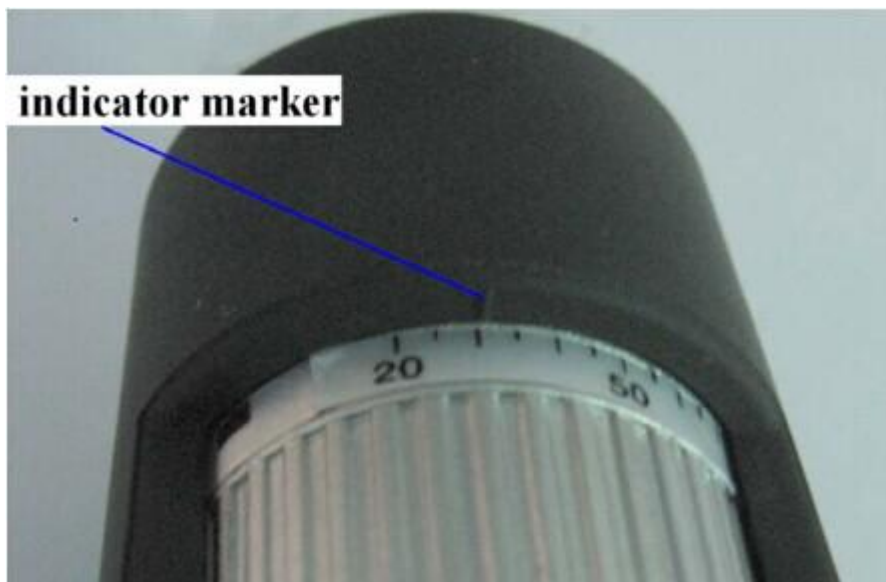
- 2.Video: focusing on the stuff that you want to video ,then click video button to start making video, after video recording began, there will be the video camera icon flashes in the column. When you want to stop recording, then click the video icon again to stop. Double-click flashes can play video, if you do not satisfied with the video, please open the package MRK VIDEO files and delete it.



## How to use measurement & calibration function

1. Point the microscope onto a target ,such as a ruler, rotate the focus wheel to get a clear focus. Watch the calibration at the lower-end of the focus wheel; note down

the magnification value that corresponds to the indicator marker on the microscope body as shown below. That value is the magnification at which the focus was set and the image taken. (This is very important, since only with the magnification ratio noted down can the object size be worked out at later steps !!)

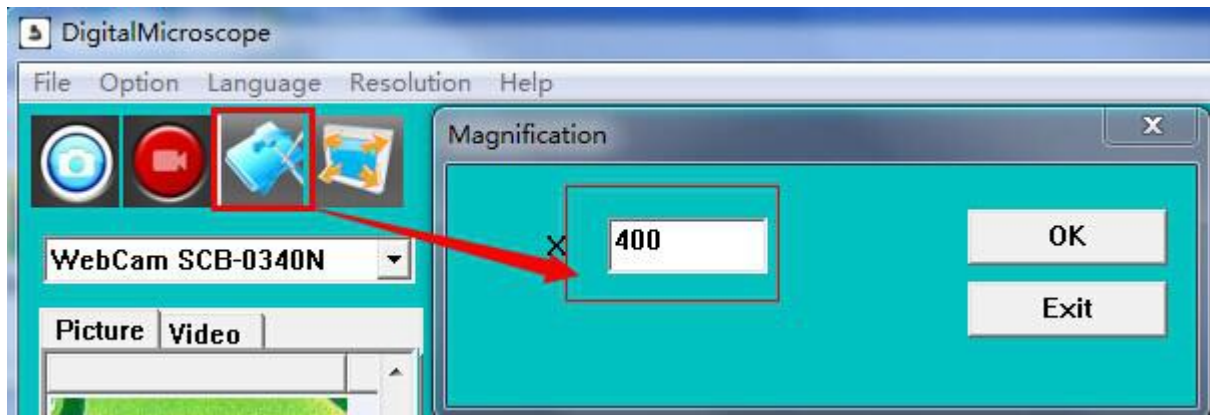


2. When the focus at the clearest point, take a snapshot



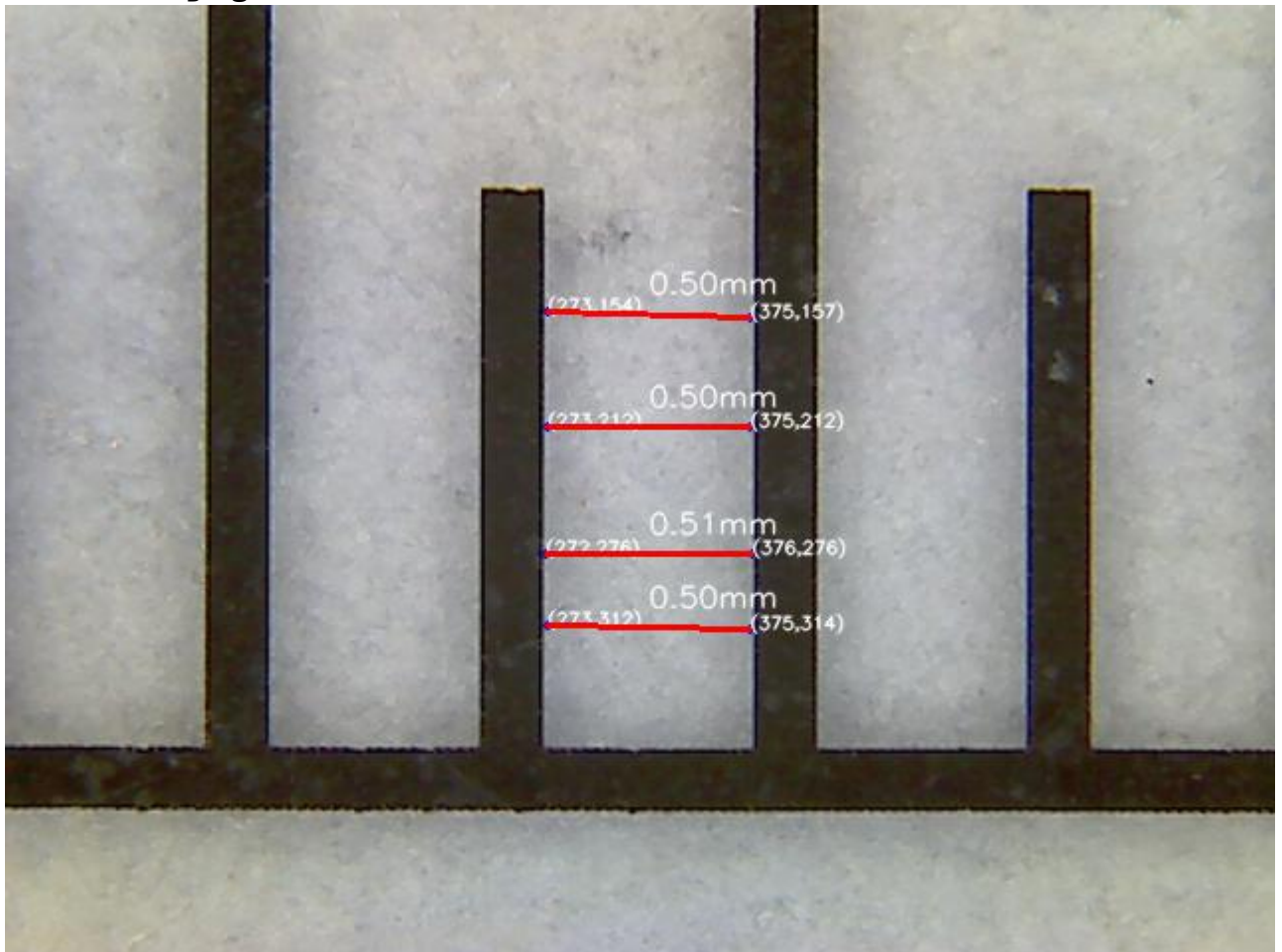
3. Click Software icon at the top . , open the fill factor (Please note it is necessary in the box to input the magnification ratio noted down on step1; otherwise the measurement is meaningless.)





4. Open the captured photo double clicking on the thumbnail. A preview window will open

**0.5mm really figure measured results:**



5. Now you can measure the size of the whole or part of the your object have taken using the available options. Click on the icons on the top . the window Following are the options:

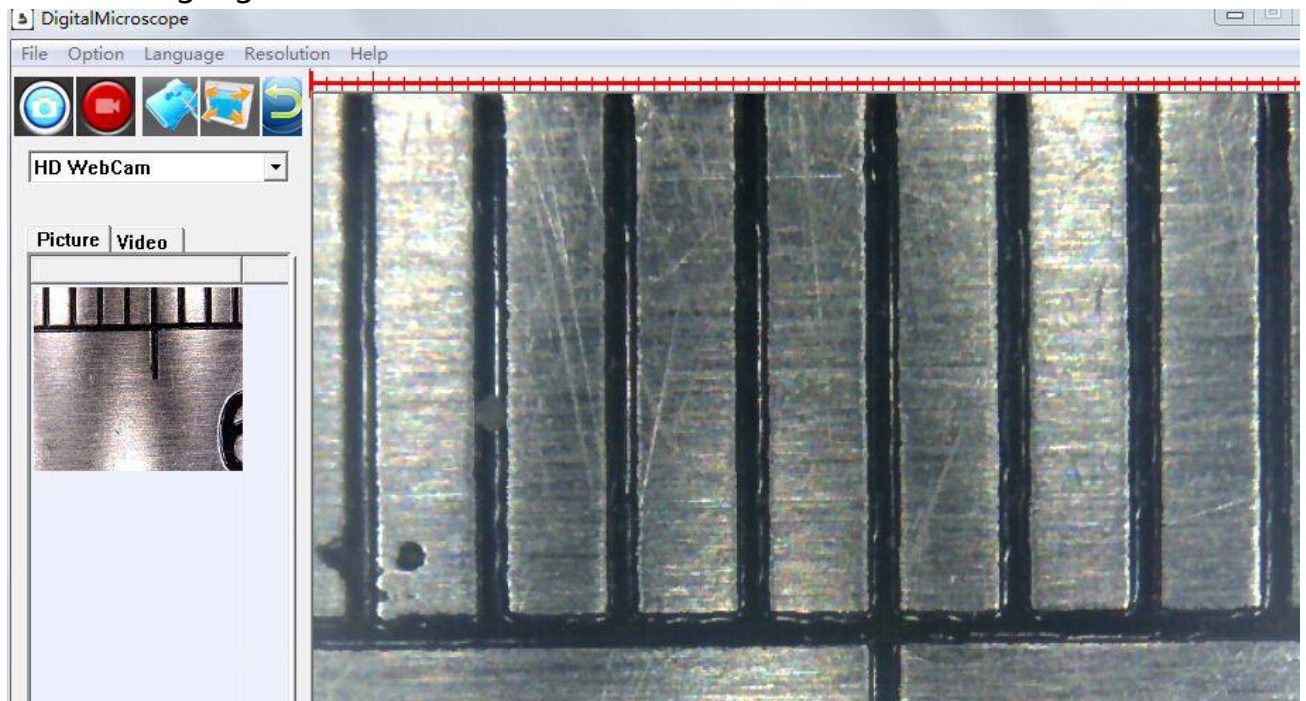
1) Direct line: click, left-click mouse to choose a start point and drag mouse to an end point, Notice that the measurement is displayed.

Release the mouse when done.

2 measured results pictures stored in the NEW file MRK package:



3 Each red gauge 0.1 mm, 0.01 mm error.



**Note:**

1. The magnification ratio you are allowed to input is from 20X, 50X, 150X, 200X, 300X, 400X, 500X, 600X and can be measured to find the photo must be 640 \* 480 resolution.
2. The measurement value worked out by the software is only for reference; it may not be 100% correct.
3. The measurement function is only available on Windows Operating System.

**Safety:**

1. The Microscope is not waterproof, so keep it dry.
2. Do not use it in a humid place like bathrooms. A dry environment will maintain its life to maximum.
3. Use the Microscope only at -5°C-50°C.
4. 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.

5. Do not point Microscope lens to the sun or strong light for a long time. Powerful light may hurt the light-sensitive electronics.

6. Avoid touching the lens.

7. 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.

8. 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.

9. Do not unplug the Microscope from USB port when LEDs are on. This may cause information loss or circuit damage. Please always close MicroCapture and then unplug the Microscope.