# **Digital Microscope**

**S06W02-200X (WIFI/USB)** 

Prepared by Digital Engineering Dept.

2014.6.9

Thank you for purchasing our WIFI/USB Wireless Digital Microscope S06-200X. This device is widely used in different fields including Textile industrial for textile inspection, Printing inspection, Industrial inspection (PCB, Precision machinery), Educational purpose, Hair Detection, Skin Detection, Microbiological observation, Jewelry & coin (Collections) inspection, Visual Assistance ,etc. There are WIFI mode and USB mode for selection . The WIFI mode is perfectly matched with IOS mobile device (iPad, iPhone) and android mobile device (android tablet PC, android mobile phone) . The USB mode is perfectly matched with Windows (XP, Vista, Win7&Win8) .

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# **Specification**

Image : CMOS Sensor

Controller: High Speed DSP (M-jpeg)

Magnification Range: 5X ~ 200X (Manually)

Focus Range: 0 ~ 40mm, other ranges can be customized

Frame Rate: VGA15~20 f/s Under 300 LUX Brightness

Capture Resolution: 640\*480, can be magnified and minified

Take Images: SNAP Shot

Video Capture Resolution: 640\*480

WIFI Standard: IEEE 802.11 b/g/n standards compliant

Frequency Range: 2.400 ~ 2.4835GHz

Light Source: Built-in 4~ 8 White-light LED and adjustable illumination ensure the magnified images are clear and bright

Illumination Scope: 0 ~ 30000LUX

Brightness Control: Manual adjustment

Fixed Foundation: Tailor-made for the microscope

Power Supply: Rechargeable 1000mA self-protection lithium battery

Application Software: Hotviewer

Support O/S: WIFI capable: such as IOS and Android

USB capable: Vista, Win XP, Win7, Win8

Language: Chinese, English (other languages can be customized)

Product Dimension: 142 mm (L) X 37 mm (R)

Product Net Weight: 100g

Available Color: Black

#### Notes before use

1. Don't disassemble the digital Microscope or change the interior parts, that would cause damage.

- 2. Don't use alcohol or organic solvents to clean the Microscope
- 3. Don't touch the lens with your fingers.
- 4. Avoid outdoor use if possible.
- 5. Storage temperature: °C ~ 40°C, Humidity: 45%RH ~ 85RH%.

- 6. In case the product gets wet, turn off the power immediately. And do not disassemble or dry with hair dryer. Take it to repair center if the digit microscope was affected by liquid or other factors.
- 7. Wireless signal range within 10 m

# Standard parts and accessories

- 1. Digital Microscope (1pcs)
- 2. Charger (1pcs), USB cable(1pcs)
- 3. Special base (2pcs)
- 4. CD- ROM (application "Hotviewer") for user manual(1pcs)
- 5. Warranty card (1pcs), quick guide (1pcs)

#### How to Use

- 1.Select the mode(WIFI/USB) then turn on the S/w.
- 2. install the Application software Hotviewer.
- 3. Please put the object on the worktable, then adjust the focus roller of Microscope to make the image clear.
- 4.Once the image is very clear, you can use the other functions in the application Hotviewer.

### Software installation

- **1.WIFI mode for IOS platform** (iPad for example)
  - APP download and installation
    Download the "WIFI Microscope" from APP Store and install it to the Ipad.



## 2 .WIFI signal connecting

Turn on the switch of microscope, adjust the illumination of light source, WIFI



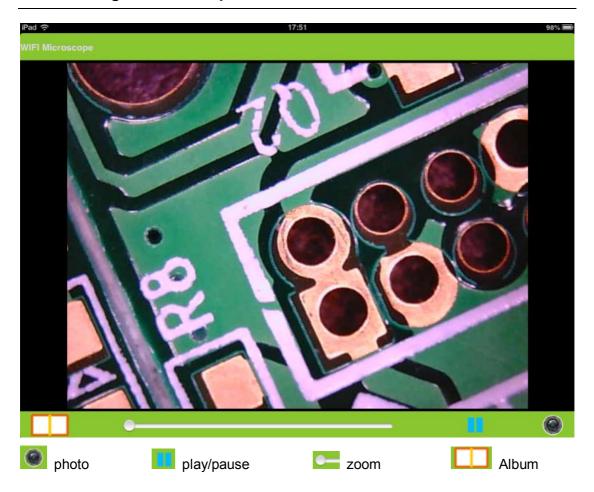
Indictor (Green LED) will flick after 5~10 seconds, then click the

on Ipad

Search the WIFI SSID "HOT\*\*\*\*\*\*" and connect it



3. Click icon and open the software.



# 2. WIFI mode for Andriod platform (android pad for example)

1. APK download and installation

Download the "Hotviewer.APK" from Google play Store and install it to the android pad .

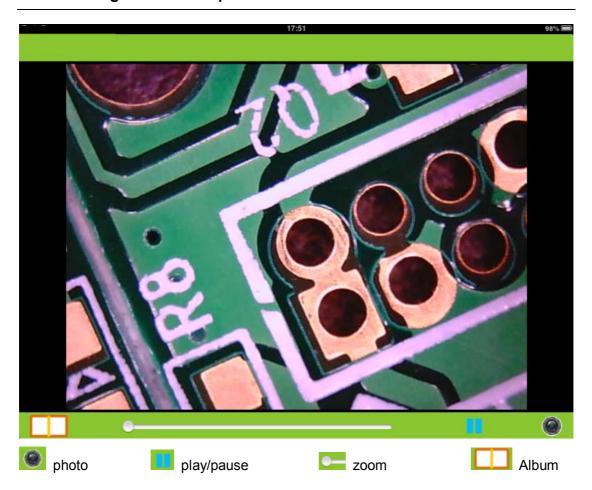
(Note: you can install 'Hotviewer 'APK to android pad via the CD -Rom)

2. WIFI signal connecting

Turn on the switch of microscope, adjust the illumination of light source, WIFI

Indictor(Green LED) will flick after 5~10 seconds, then click the pad, Search the WIFI SSID "**HOT**\*\*\*\*\*\*\*\* and connect it.

3. Click icon and open the software.



# 4. WIFI mode for Mac computer

1 the software "Hotviewer.dmg" installation. Search the folder for MAC from the CD-Disk and open it. Double click the "Hotviewer.dmg" in your Mac computer.





When the installation finish , the icon appear on the desktop



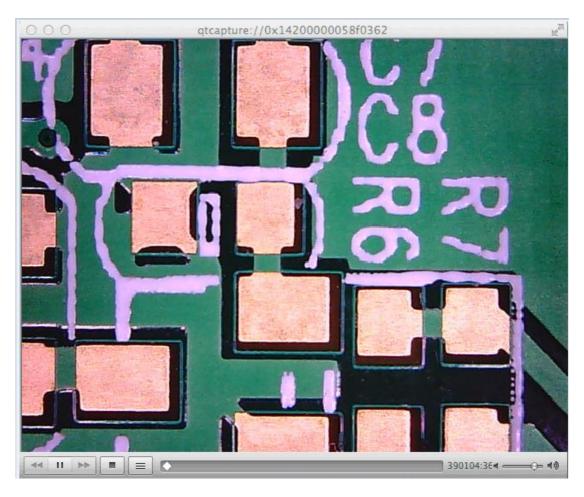


Turn on the switch of microscope, adjust the illumination of light source, WIFI Indictor (Green LED) will flick after 5~10 seconds, Search the WIFI SSID "HOT\*\*\*\*\*\*"

and connect it . then click



icon ,as followings

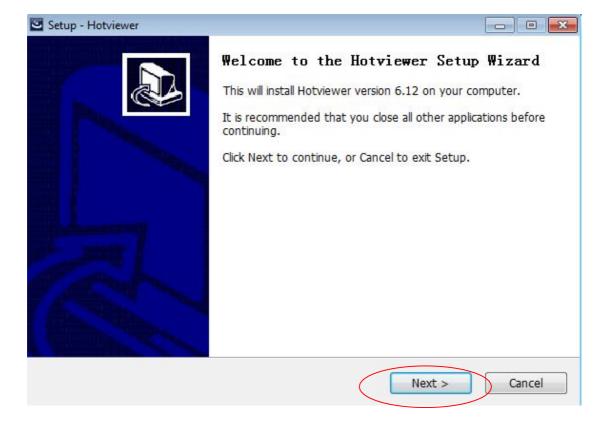


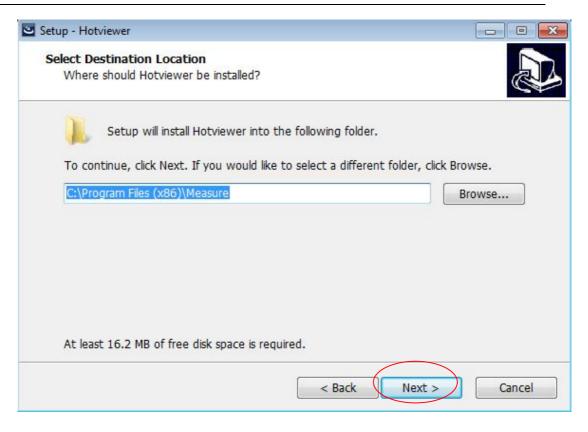
# 4. USB mode for Windows (Win7 for example)

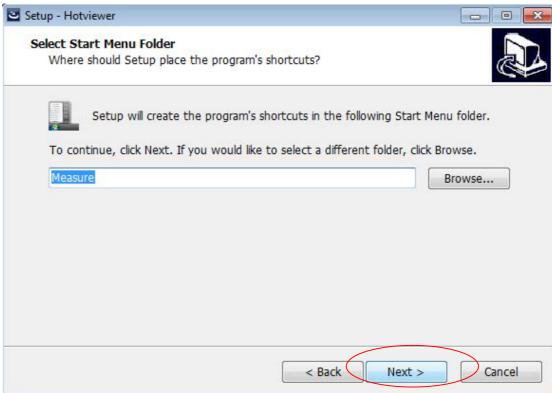
1. the software Hotviewer.exe installation.

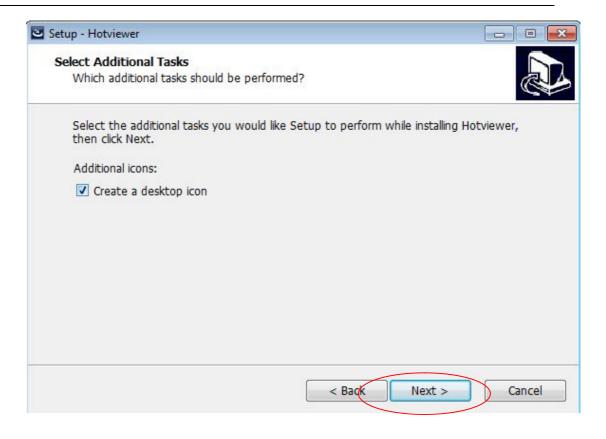


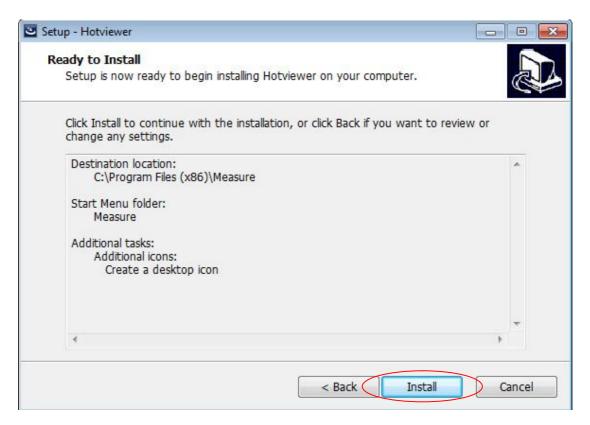
Select the Language, and then operate it according to the identification.

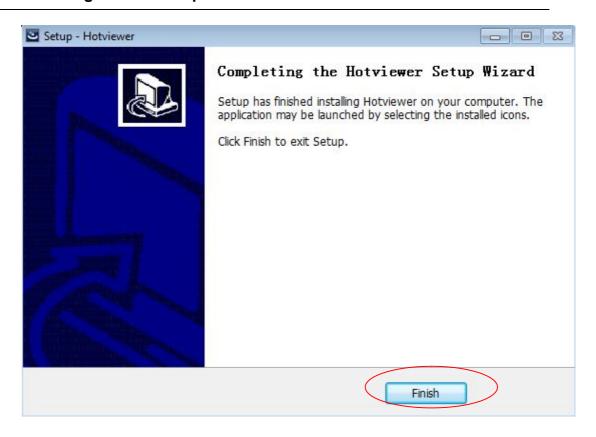






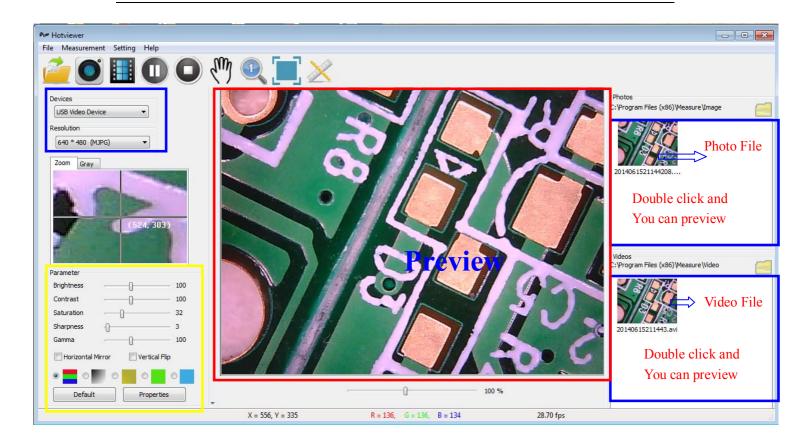




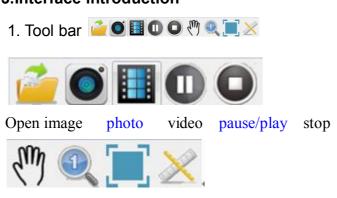


2. When a microscope was connected to a computer via a USB cable,

Click the Hotviewer, you can open the preview of the application interface.

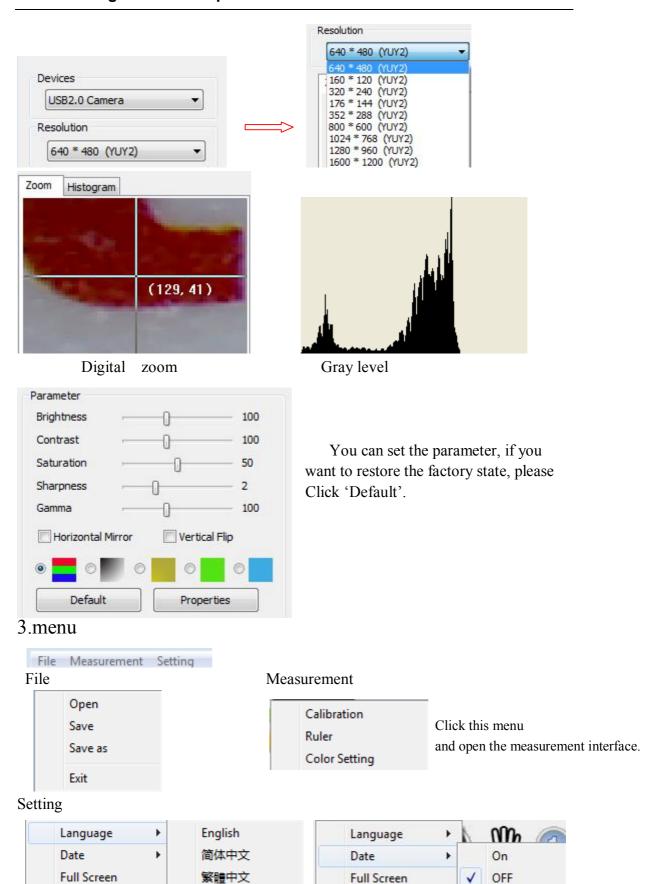


## 3.Interface introduction

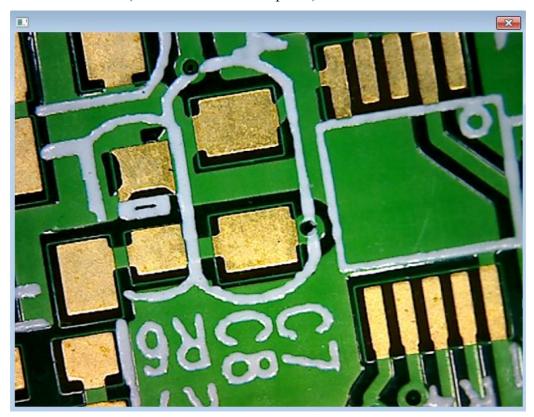


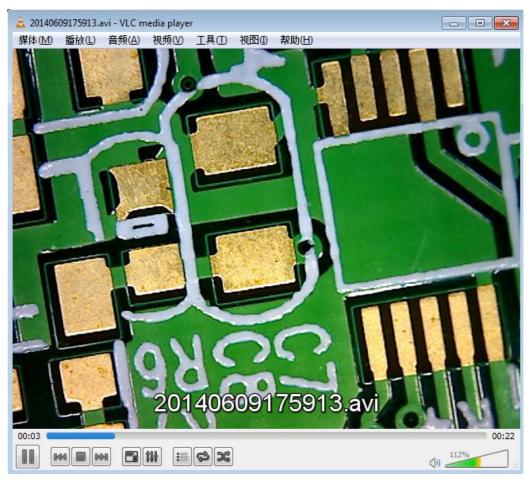
move initial full screen measurement

2. Devices

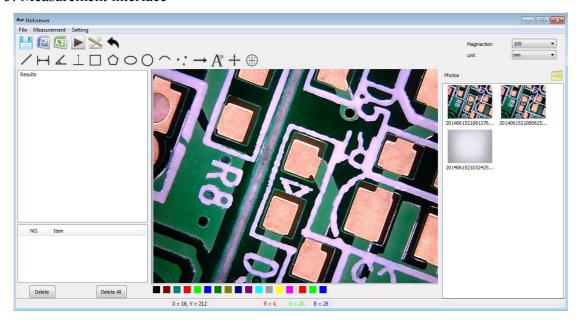


4 .Photo & Video (double click file and open it)

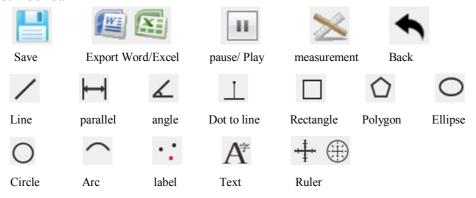




#### 5. Measurement interface

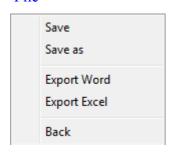


#### 6. Tool bar

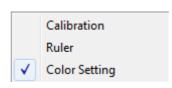


# 7. menu introduction

#### File



#### Measurement



# Setting

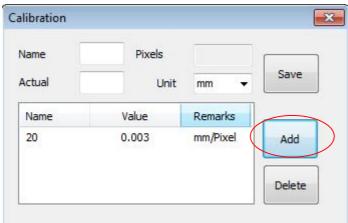


#### 8. Measurement

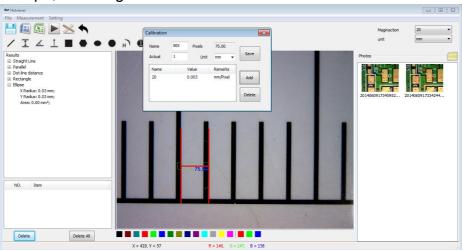
### (1) Calibration

Before measurement, please do calibration to make sure a certain accuracy. Our experience tells us that the measurement accuracy can be controlled to as high as 99%. Human eye distortion or defocus could cause measurement tolerance. More practice is helpful to measurements.

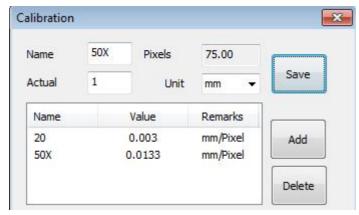
Step 1 ,Click and press ' add'



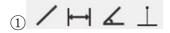
Step2, Shooting calibration ruler calibrate the ruler

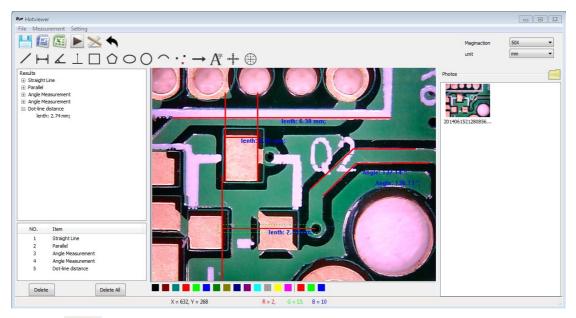


Step3, Record key information and save it



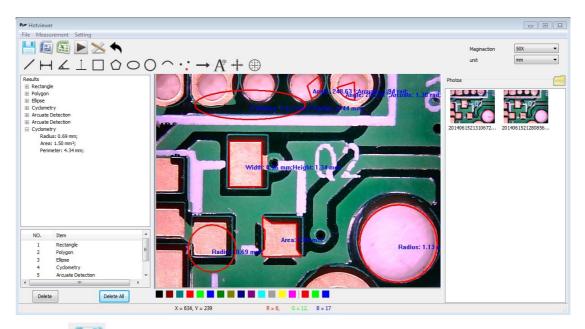
## 2. Measurement





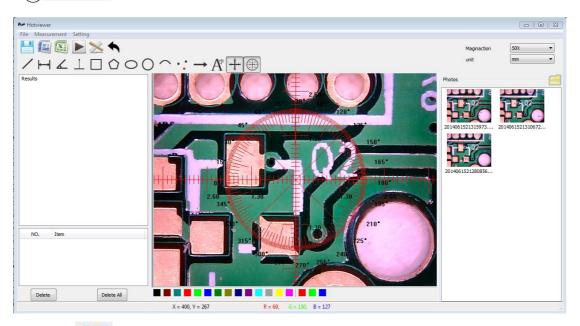
Press to save picture.





Press to save picture.





Press to save picture.

 ${\Large \textcircled{4}} Export\ result$ 

Press , then export the file selected.

#### Item: 20140615213106723.bmp↔

Data: 2014-06-15 21:334

#### Maginaction ruler0.0130 mm/px↔

1. Rectangle:..

Width: 0.96.mm; Height: 1.34.mm; Area: 1.29.mm<sup>2</sup>; ...

2. Polygon:..

Area: 0.95.mm<sup>2</sup>

3. Ellipse:..

X Radius: 1.61.mm; Y Radius: 0.44.mm; Area: 2.21.mm²; ...

4. Cyclometry:

Radius: 1.13 mm; Area: 4.03.mms; Perimeter: 7.11 mm; ...

5. Arcuste Detection:..

Angle: 285.74 °; Arcuste: 1.30 rad; Radian: 0.69.mm;

6. Arcuste Detection:

Angle: 248.63 °; Arcuste: 1.94 rad; Radian: 0.79.mm;

7. Cyclometry:...

