# **Digital Microscope**

# **User Manual**

Thank you for Purchasing our Digital

Microscopeit is a slim type tool and can be easily

used in different fields including

# **Specification**

Image CMOS Sensor **Controller High Speed DSP (Driver Free available)** Focus Range 0mm ~ 40mm **Snap Shot Software and Hardware** Video Capture Resolution 0.3MP-2.0MP Built-in 8 White-light LED and adjustable illumination ensure the magnified images are clear and bright Still Image Capture Resolution 640X480-1600X1200 Frame Rate 30 f/s under 600 LUX Brightness **Digital Zoom 5X Sequence Mode Brightness Control Manual adjustment** Magnification Range :200X\300X\500X\600X\800X\1000X\1600X ( Model differences) Power Supply USB Port (5V DC) USB 2.0 & USB 1.1 Compatible **Operation System Windows XPVistaWin 7 32 bit and 64 bit.** Language: EnglishChinese and other language by selection System Requirement: Pentium Computer with 700M Hz & above 20M HD Space CD ROM Driver64MB RAMDirect X VGA Card **CD disk Driver and Micro-Measurement Tool** Product dimension 112 mm (L) X 33 mm (R) Product net weight: 380g Available color: Matting blackUV black; and other colors.

### **Notes before use**

**1**. Don't dissemble the digital Microscope or change the interior partsit can cause damage.

- 2. Don't clean the Microscope with alcohol organic solvents
- 3. Don't touch the lens with your fingers.
- 4. Avoid outdoor use if possible.
- 5. Storage temperature0°C ~ 40°CHumidity:45%RH ~ 85RH%.

6. In case the product gets wetleave PC connection immediately.And do not dissemble or dry by hair dryer. Send to repair center if the digit

microscope was effected by liquid or other elements. 7. Measurement Data only for reference.

### **Product Outlook & Standard parts**

- 1. Digital Microscope (1pcs)
- 2. USB 2.0 cable
- 3. Metal fixed Stand (1pcs)
- 4. CD ROM (DriverMeasurement softwareUser Manual)

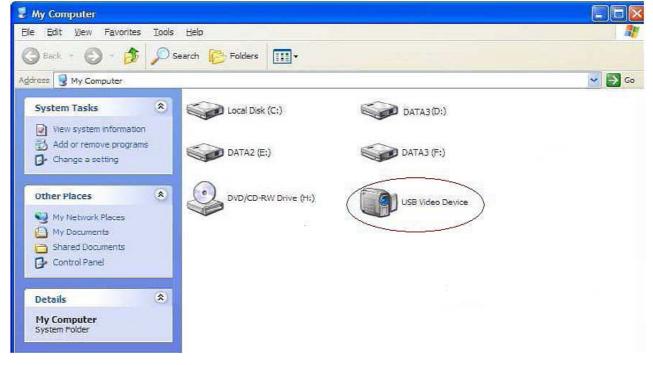
### Hardware system requirements

Windows 2000 × XP × VISTA × WIN7 Pentium 1GCeleronAMD 1G & above128MB Memory150MB Hard Disc memory space16-bit & above VGACD-ROMUSB2.0 or USB1.1.

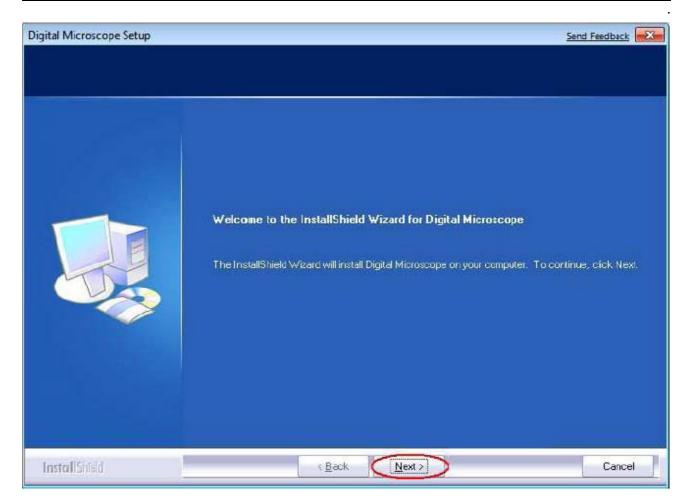
### How to install the Driver

Digital Microscope is a free Driver Product , it can be worked immediately after connected to the computer with operation system above win2000 version.

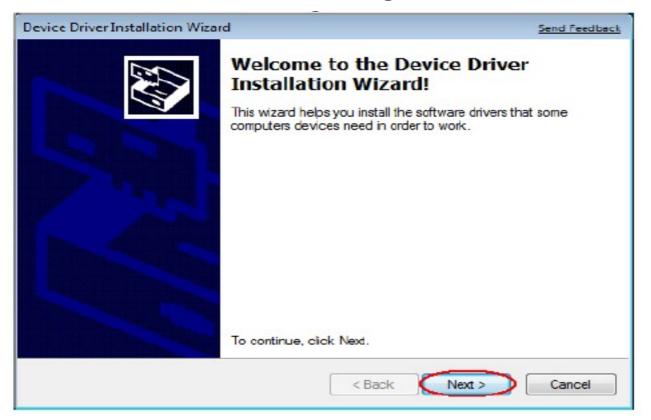
**1.** Connect the Portable digital microscope by USB2.0 cable to your computerdouble click 'my computer' icon on your computer desktop below interface will be shown up.



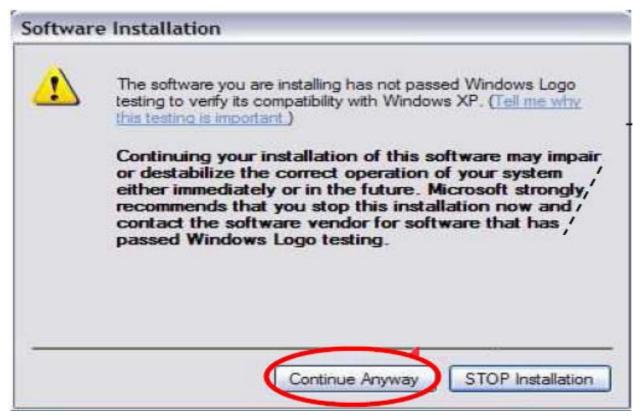
2. Double click the Video device icon as above red marked in your computer. Now it is ready to use.



# Click"next"to continue, as followings:



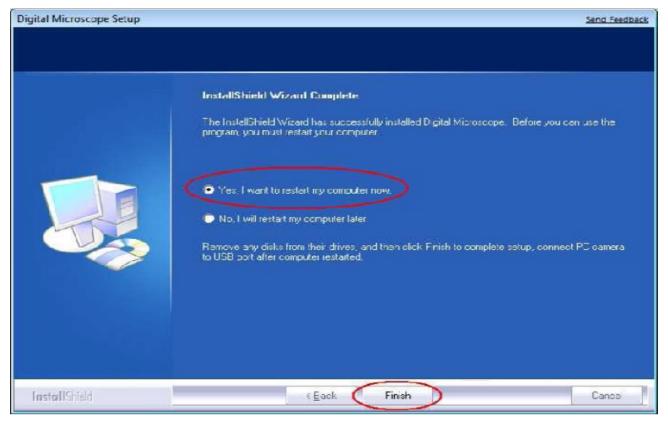
### Click"next"to continue, as followings:



# Click "continue Anyway"as followings:



# Click"Finish"to continue, as followings



Select 'YesI want to restart my computer now'and click "finish".

After restart your computerPlug-in the USB port of Digital Microscope into Computer USB port. Following the user guide by steps and complete by click "Next" - "Continue anyway" - "Finish".





# 2 Measurement installations:



# 2 Click "next" to continueas followings

L GAOSUO
Select Start Menu Folder Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
GAOSUO Browse
Don't create a Start Menu folder
< <u>B</u> ack <u>N</u> ext > Cancel

# 3. Click "next" to continueas followings

L GAOSUO	
Select Destination Location Where should be installed?	
Setup will install into the following folder.	
To continue, click Next. If you would like to select a different folder, click	Browse.
C:\Program Files\	Browse
At least 16.6 MB of free disk space is required.	
< <u>B</u> ack Next >	Cancel

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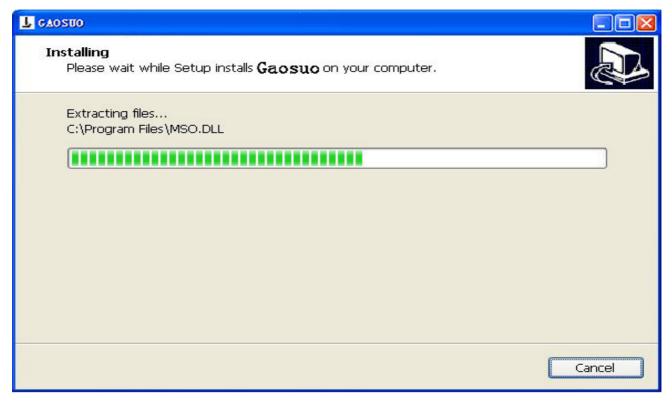
# 4. Click "next" to continueas followings

L GAOSTO	
Select Additional Tasks Which additional tasks should be performed?	
Select the additional tasks you would like Setup to perform while installing then click Next. Additional icons: Create a desktop icon Create a Quick Launch icon	
< Back Next >	Cancel

# 5. Click "next" to continueas followings

Setup	
<b>Ready to Install</b> Setup is now ready to begin installing on your computer.	
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:\Program Files\	
Start Menu folder: Additional tasks:	
Additional icons: Create a desktop icon	
	<u>&gt;</u>
< Back Install	Cancel

# 6 Click "Install" to continueas followings



Wait a few seconds while the installation taking place.

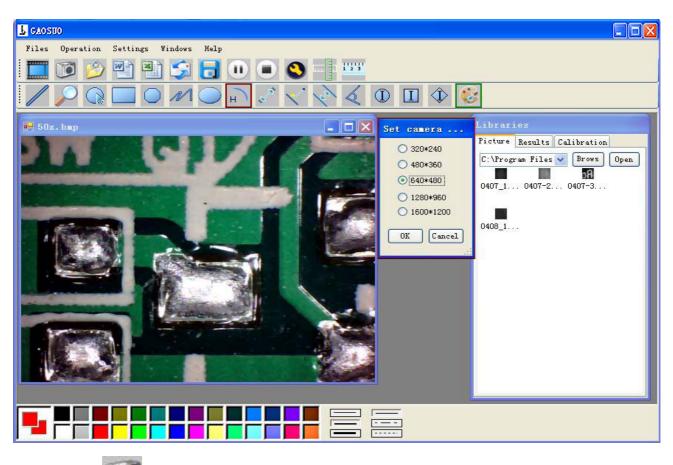
7.Click "Finish" and the installation completes.



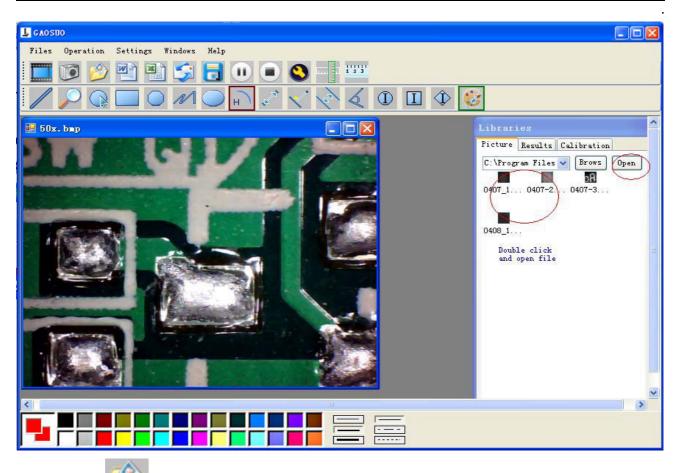
8.After the installation completesdouble click at computer desktop to start using the software.

9 Click open the operation system

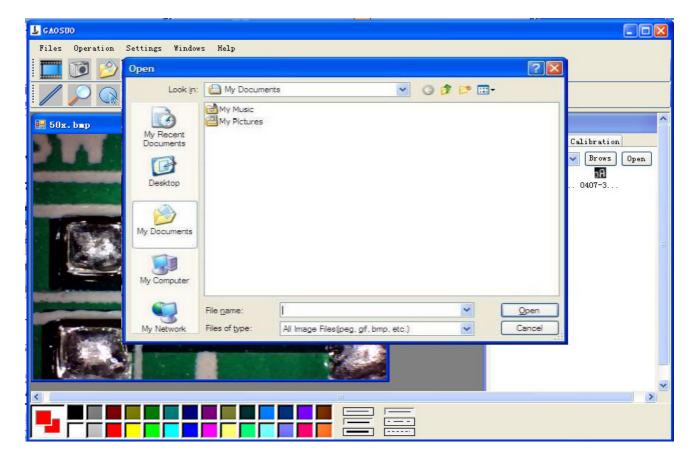
Choose the Image resolution from 320\*240 to 1600\*1200default at VGA Mode640\*480



10 Click we measurement function.



# 11 Click 🦻 to open picturesand click to save pictures





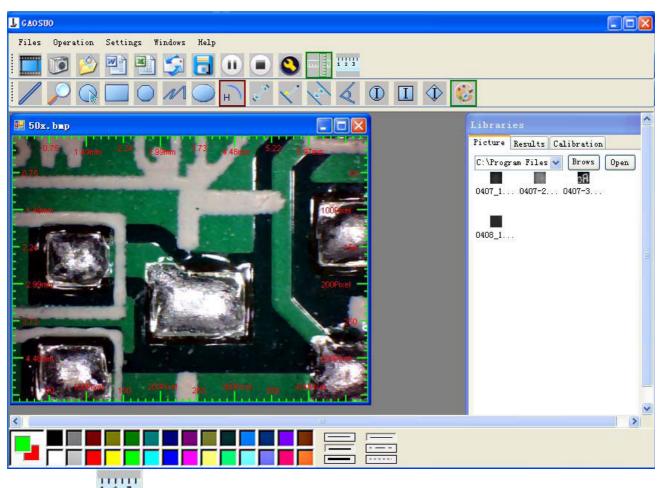
# 13Image Parameter including Image setting and special

### effects

	o Proc Amp Camera Control	
Brightness		- 17 Г
Contrast		- 100 -
Hue	1	- 0 -
Saturation		- 9 1
Sharpness	1	- 0 1
Gamma		- 22 Г
White Balance	1	r
Backlight Comp	I	- 1 Г
ColorEnable 厂	Default	Auto



# 16 Click Rulleras followings



17 Click **tail** start calibration make sure certain accuracy.

Our experience told us that measurement could be controlled at 99% high precision. Measure tolerance could be caused from human eye distortion and defocus. More practice is helpful to measurements.

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	Picture Results Calibration I. Object Value 1 Mode parallel Unit mm Line 1.754 118
	10 Name 1 parallel V Select Delete Delete V

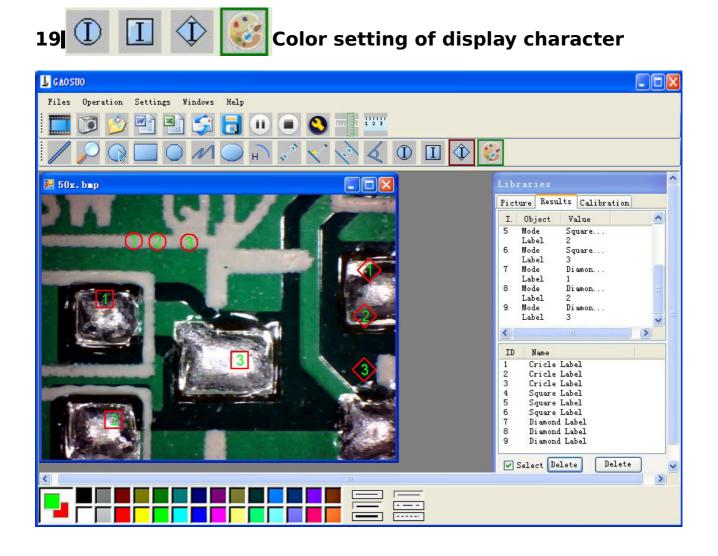
# 18 Key in the Measure data(Pixel)Unitand Click' OK'

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2. Measured calculate the (Example: Ca	several times, ge average value, ei	et several sets o nter into the foll be the average	e button, calibrate the rule of measured data, llowing input box. e of 67 pixels, then fill in	er.
Name	Value	Uni t	$\frown$	
25X	1	mm	= (118) Pixel	
	ОК		Cancel	

# Warning:

Please do calibration again once Magnification Ratio

### changed.





From Left to right:

Line ring Square Polygon Set-line Length

**Oval Arc Point to Point distance Point to Line distance** 

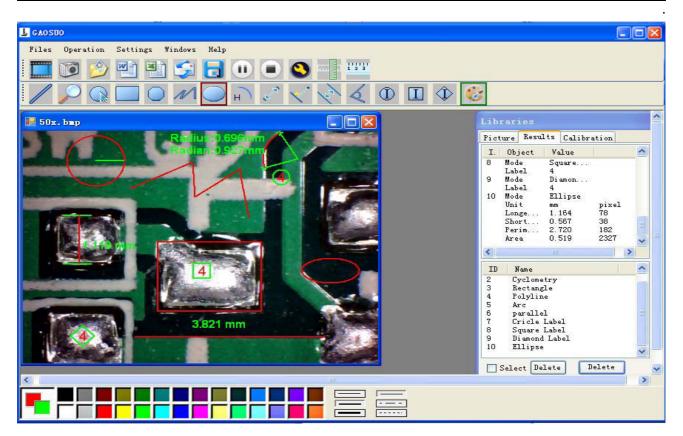
Parallel line Angle

(as below show)



# Example: Measure data under word file

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### For example 1 Line measurement:

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0.806 mm	ID Name   1 Straight Line   2 Straight Line   3 Straight Line

For example 2 Rectangular measurements:

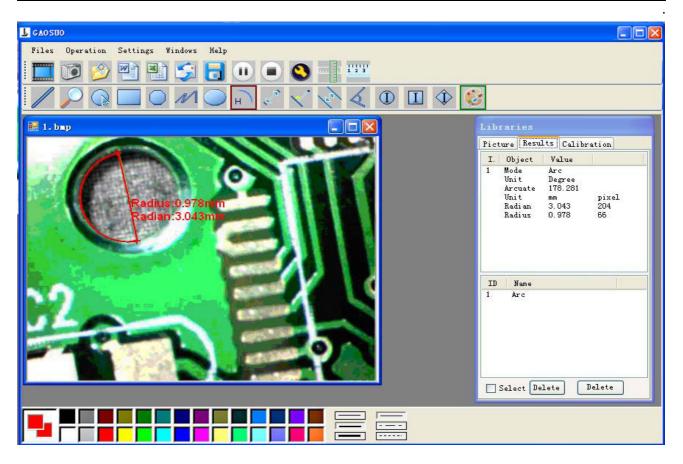
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		Picture   Results   Calibration     I. Object   Value     1 Mode   Rectangle     Unit   mm   pixel     Width   3.776   253     Height   3.746   251     Perim   15.045   1008     Area   14.146   63503     ID   Name   1     1   Rectangle

# For example3 Ring measurements:

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	Unit mm pixel Radius 2.164 145 Diameter 4.328 290
	Perim 13.598 911 Area 14.714 16512
	ID Name 1 Cyclometry
	Select Delete Delete
	Select Delete Delete

For example 4 Arc measurements:



### **3Please click**

### to Continue when the NET

# Framework2.0 is necessary