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**5307-ID100A/ 5307-ID110A/ 5307-ID200A
DIGITAL MEASURING MICROSCOPE
OPERATION MANUAL**

PLEASE SCAN QR CODE TO
WATCH THE OPERATION
VIDEO OF PRODUCTS.



Attention

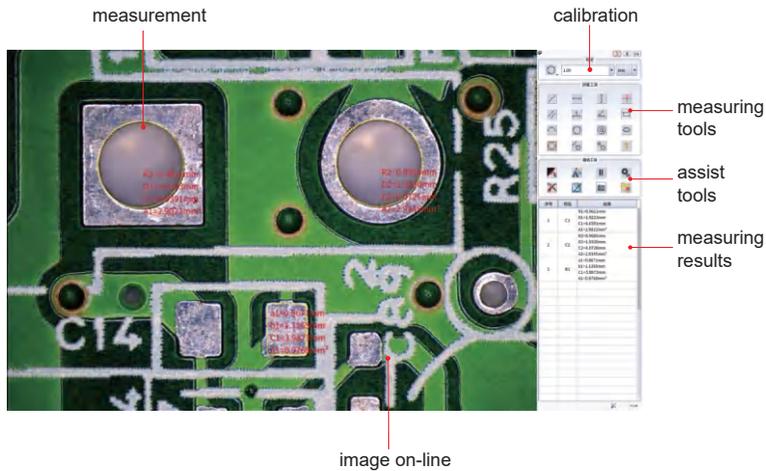
- ◆ To avoid danger or damage incurred to the lens, do not touch the lens or sensor directly with your fingers.
- ◆ To avoid failure or electric shock hazard and so on, do not disassemble or modify the internal structure of the device.
- ◆ Do not plug in or unplug the anything port when hands are wet.
- ◆ If the lens or sensor is dirty or damp, you should better use dry and non-linen fabric or professional lens tissue to wipe them. To avoid scratches on the surface, do not touch the lens with your fingers. Wipe the lens or sensor lightly.
- ◆ The products are not specifically designed for an outdoor use. Do not expose it to outdoor environment without any protection. Excessive temperature and humidity will damage the lens. Please avoid using the product under the following environment: high temperature or high humidity environment, places with direct sunlight, dirt or vibration and places near heat source.
- ◆ Please use and store in the following environment:
 Operating temperature: 0°C~ 40°C
 Storage temperature: -20°C~ 60°C
 Operating Humidity: 30~80%RH
 Storage Humidity: 10~60%RH
- ◆ If any foreign matter, water or liquid enter into the device by accident, disconnect the power cable immediately. Please send it to the maintenance center and do not use the hair dryer to dry it by yourself.
- ◆ To avoid electric shock by accident, please power off microscope before you move your computer or laptop.
- ◆ The cleanliness of the device lens will directly affect clarity degree of contents from the computer screen during preview. Problems like various circles or spots on the screen may mostly be incurred by dirt on the lens. When cleaning, please use professional lens tissue or other professional detergent to clear the dirt on the lens.

Structure

1 Name:



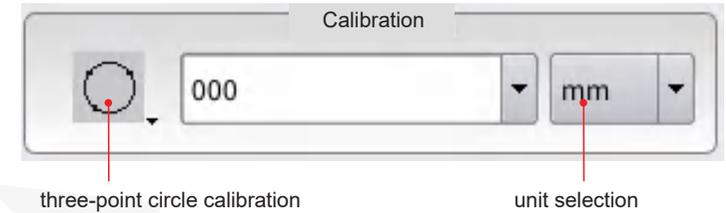
2 Software:



Operation

1 Calibration:

- ◆ Click the icon in the upper right corner of the menu. You can choose the line segment calibration or the three-point circle calibration. The line segment calibration is that you can choose two dots to demarcate the lens. The circular calibration is based on the circle selected on the calibration board. Users can choose according to the type of the calibration board. Choose three-point circle calibration methods, for example, place the circular calibration plate at the bottom of the lens, the image adjust after clear, freely choose three points on the outside perimeter of the circle, can draw a circle, check drawn and calibration plate coincidence degree, if not satisfied can draw circles until satisfied. Then in the dialog box enter the current lens of the multiplier, calibration of the actual size of the circle and other information. At this point in the menu "calibration" dialog box will appear the current calibration information.



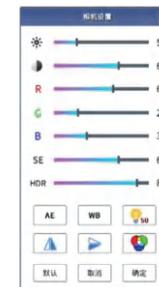
- ◆ Unit selection: on the right side of the "calibration" dialog box, select the drop-down button. The user can select the appropriate unit.

Notes:

- Confirm to do calibration before doing measurement.
- Measure different objects in same magnification after doing calibration.
- After calibration, rotate focus adjustment to focus the object. If rotating the magnification adjustment, do calibration again.

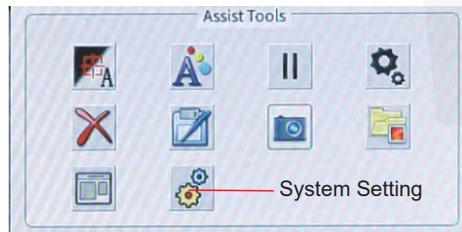
assist tools:

- ◆ Adjust the camera parameters. Select the camera parameter key and appear as shown below. The current image can be set appropriately.



- brightness icon
- image contrast icon
- R red color ratio
- G green color ratio
- B blue color ratio
- SE edge enhancement
- HDR wide dynamic
- AE "AE" is automatic exposure. Camera can automatic adjust to the most brightness on the basis of current brightness
- WB "WB" is White Balance. Please put a white paper or other white object under the lens, then press the button, and the system will automatically perform the white balance until it is finished.

-  Electric frequency choice: user can choose according to the current market frequency, avoid the screen flashing.
-  Mirror button: Image can be mirrored.
-  Image reverse adjustment button: Image can be reversed.
-  Color and monochrome image conversion: color or monochrome options for images
-  Select manual/automatic selection. Select the points on the screen, and if you choose to select the points manually, the point where the mouse points are taken is there. If the automatic smart selection is selected, then the system automatically searches for edges automatically according to the 20 pixels around the mouse point. This approach can reduce the human error of selecting points. But you can't have more than two edges around the choice point, or you might choose to make a mistake.
-  Pictorial information selection. A dialog box appears after the click. The user can set the line width, color, the font size, color and label of the image, etc.
-  Screen freeze button. If the machine in the drawing is unstable, you can freeze the picture by freezing the current button. Press this button again to remove the freeze.
-  Clear button. All items on the screen can be cleared, and the information on the right side of the data column will not be removed.
-  Save the measurement data. The measurement data can be saved and can be opened in Excel in the computer
-  Save the measurement image. The image and data in the current screen can be saved in the form of pictures. The format is BMP or JPEG.
-  Preview the saved image. You can preview the previously saved images.



Language settings: system setting-language-switch language.

3 measuring tools:

-  measure length of line or distance between two points
-  measure distance between two parallel lines
-  measure distance between point and line
-  measure radius, diameter, girth and area of circle with three points
-  measure minimum distance between point and circle
-  cross hair
-  measure length of line or distance between two points in horizontal direction
-  measure radius, length and angle of arc
-  measure radius, diameter, girth and area concentric of circles
-  measure distance between line and center of circle
-  add text
-  measure length of line or distance between two points in vertical direction
-  measure angle of two lines
-  measure girth and area of polygon
-  measure length, width, girth and area of rectangle
-  measure center distance between two circles

Mouse Function

- 1 **CPI adjustment:**
 This mouse has five CPI adjustments of 800-1200-1600-2000-2400 and the default is 1200 cpi when powered on. If you want to switch other speeds, press the CPI key (under the mouse pulley) to switch CPI. You can switch between the five gears until you like the speed. During the switching process, the LED indicator will flash once for 800 cpi, twice for 1200 cpi, three for 1600 CPI, four for 2000 cpi, and five for 2400 cpi.

- 2 **Smart sleep and shutdown:**
 If you do not use the mouse within 8 minutes, the mouse will enter the intelligent sleep state, so as to save power. To restart the mouse, just press any key at will. If you shut down the instrument or unplug the receiver, just press a key or move the mouse at will, the mouse can enter the sleep shutdown state after 3 seconds. If you restart the mouse, you need to press any key.
 Tip: take out the battery when you don't use the mouse for a long time, so as not to corrode the parts.

Parameter

1 **Specification:**

5307-ID100A		5307-ID200A	
Magnification	Measuring accuracy	Magnification	Measuring accuracy
12X	±9 μm	6X	±15 μm
17X	±9 μm	8X	±15 μm
26X	±8 μm	13X	±9 μm
35X	±7 μm	17X	±9 μm
43X	±7 μm	21X	±9 μm
51X	±7 μm	25X	±9 μm
60X	±6 μm	30X	±8 μm
68X	±6 μm	34X	±8 μm
77X	±5 μm	38X	±7 μm

2 **Standard delivery**

Main unit	1pc
Calibration plate	1pc
Power adapter	1pc
Mouse	1pc
16G USB flash disk	1pc
1X auxiliary objective (included in 5307-ID100A)	1pc
0.5X auxiliary objective (included in 5307-ID200A)	1pc