
MicroQ XLITE

Bedienungsanleitung

1. Specification

* Full HDMI 1080P@60FPS standard
Camera, using sony HD high sensitivity
CMOS sensor

* 9" display, image captured or recorded via TF

* Support sync output to monitor and computer

* Built-in YoungWin OS, support more than 20
kinds of measurement graphics

Specification	
SENSOR	IMX307
Sensor size	1/2.8"
Pixel size	2.9*2.9µm
Resolution	1920*1080@60FPS
Frame rate	1920*1080@ 60FPS
Storage	TF card
Video	1920*1080@30FPS
Exposure time	1 - 999 millisec
Exposure	Auto and manual
White balance	Auto and manual
Parameter	Color, Mirror, Grid, Scale rule etc.
System software	Youngwin OS
PC software	S-EYE2.0
Work temperature	0-60°C
Storage temperature	-20-85°C
Size	225 x 149 x 52 mm
Weight	600 gramm
Power	DC 12V

2. Production introduce

2.1 Installation and operation



2.1.1 Remove the dust cover and the plastic cover film in the screen and put the screen to the C-mount.

2.1.2 Connect the mouse to the USB port.

Note: USB2.0 Hub can be used to USB port if more USB ports needed, so that more devices can be used.

2.1.3 TF card for image saving has been inserted into the screen in factory.

2.1.4 Connect DC 12V power supply, the camera works automatically. Turn on the screen.

2.1.5 Move the mouse to the left lower corner in the screen to show the setting and set the parameter.

Note: The On/off Button for Screen is only for turn on or off the screen, and it is not for power on or off of the camera. The camera is on or off automatically after the DC power supply insert or not.

The last function and the dialog box should be closed before the next function and the dialog box would be used.

3.1 Interface Function

Connect DC 12V power supply, the camera works automatically. Turn on the screen.

3.1.1 Main Interface

Move the mouse to lower side in the screen to show the main interface.



Photo



Video



Preview



Zoom in



Zoom out



Mirror



Flip



Monochrome



Freeze (frozen)



Cross Line Mark: It would be correct after the calibration finished. See 3.2.3 for the calibration operation.



Two images Comparison: Compare the image from outside store device with the real-time preview image.



Four images Comparison: Double click to random preview image to freeze the image, then double click again to release image freezing.



HDR: Suppress over-bright in the image, click again to restore recognition setting.



Area White Balance: Move the sample out of the light path (gray whit area shown in the screen) Move blue frame with mouse to make white balance in random area.



Exposure: Manual exposure, click again to auto exposure



Restore Factory Setting



Languages Selecting: English, Simplified Chinese, Traditional Chinese, Spanish can be switched.



Set Time: Move the mouse to the corresponding position to turn the roller to set time.



Parameter setting

Click and enter the following menu

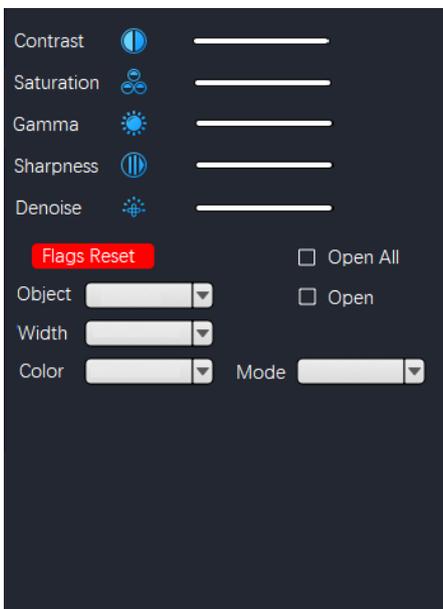


Move the corresponding bar to adjust the parameters. The user can adjust the image brightness with manual operation to adjust target brightness and exposure time if auto exposure and auto white balance is not correct.



Image adjustment:

Click and enter the following menu



Grid line setting:

Click “Open All” to open the eight horizontal and vertical scale lines. Click “Open” to open or close random line. The color and width of the random line can be set, and eight colors and four different widths can be chosen.



The Storage and the software version information can be found.



Turn off the screen, and press the button at the right side to turn on it.

3.1.2 Measurement Menu

Move the mouse to the screen top to show the Measurement Menu like the following:



- : Drawing point: Click the button and click “confirmation” to random point to draw point and show the coordinate.
- : Curve: Click the button, and click random point to define the start point, then move the mouse to the final point and click to measure the length of the mouse moving path.
- : Horizontal straight line: Click the button and click random point to define the start point, then click the final point to measure the horizontal straight line distance between the start point and the final point.
- : Vertical line: Click the button, click random point to define the start point, then click the final point to measure the vertical line distance between the start point and the final point.
- : Arrow: Click the button, click random point to define the start point, then click to define the arrow direction and the position.
- : Straight line: Click the button, click random point to define the start point, then click the final point to measure the straight line distance between the start point and the final point.
- : Parallel line: Click the button, click random point to define the start point, then click to the final point to determine a straight line, after that click to determine the parallel line position and measure the distance between the parallel lines.
- : Vertical line: Click the button, click random point to define the start point, then click to the final point to determine a straight line, after that click to determine the vertical distance to the straight line and measure the length of the vertical straight line.
- : Angel Measurement: Click the button, click random point to define the start point, then click to the final point to determine a straight line, after that click to determine an another straight line and measure the angle degree.
- : Rectangle: Click the button, click random point to define the right angle position, then click to determine the rectangular perimeter and measure rectangle perimeter and the area.
- : Polygon: Click the button, click random point to define an angel, then click again and again to add angels, the final point and the first point must coincide and measure the polygon perimeter and the area.
- : Arc: Click the button, click random point to define the start point, then click to the second point to determine a straight line, then click to a third point to determine the second straight line and measure the arc length and radian.
- : Drawing circle with radius: Click the button and define a random point to the circle center, then click to determine the distance to the center and measure the circle area and circumference.



: Drawing circle with two points: Click the button and define a random point to be a point on circle, then click another point to determine the circle, and measure the circle area and circumference.



: Drawing circle with three points: Click the button and click to define three random points to be the points on circle, and measure the circle area and circumference.



: Line circle distance: Click the button and click to define a random point to be as the circle center, then click to determine the circle, after that click to determine the distance between the line and the circle center and measure the Line circle distance.



: Concentric circle: Click the button and click to define a random point to be as the circle center, then click to determine the circle, after that click to determine the second circle, and measure the distance between the two circles.



: Measurement for the distance between two circles: Click the button and click to define a random point to be as the first circle center, then click to define the center of the second circle, after that click to determine the second circle and measure the distance between the centers of the two circles.



: Text remark: Click the button to show the dialog box for text remark



: Color: Click the button to choose the color of line, and eight colors can be chosen.



: Line thickness: Click the button to choose the thickness of line, and four thickness can be chosen.



: Delete: Click the button and choose the target with mouse then click to cancel it.



: Delete all: Click the button to cancel all items in the screen.



: Screenshot: Click the button to make the screenshot.



: File output: Click the button to save the file

3.1.3 Calibration

To ensure the correct measurement, calibration to microscope magnification and image preview resolving power should be taken before measuring.

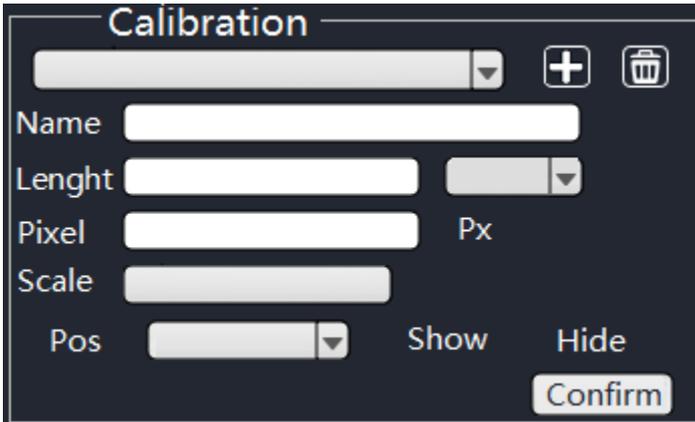
Note: Calibration should be done before measuring for different time objective.

Put micrometer in the stage, adjust the image ready

Recommend micrometer: 10 μ m/scale, 100 scales, total length 1000 μ m

Micrometer is not for standard, and it should be purchased by user.

3.2.3.1 Click the button  and enter the calibration menu:



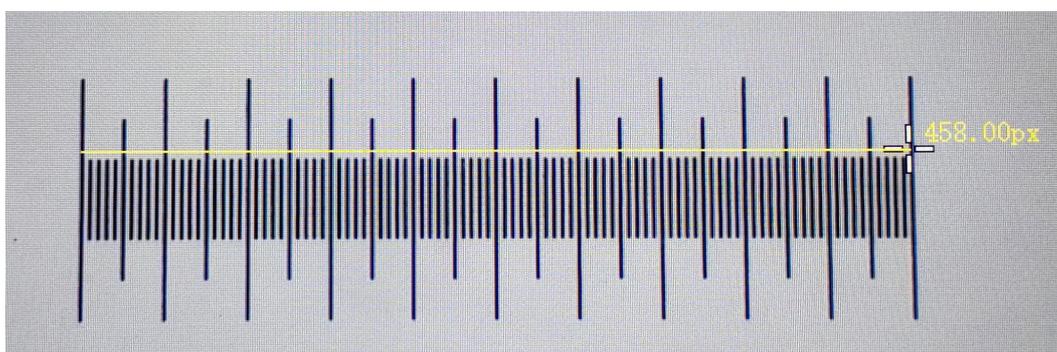
3.1.3.1 Click the button  to add the name of new calibrating target, and click the name frame to name it. the keyboard as the following sketch can be shown after clicking name frame.



Click the keyboard to fill the content, then click “enter” button to confirm the name. Click “close” button to close the dialog box.

3.2.3.2 Click the blank frame of Pixel, Pull the calibrating line with mouse in the micrometer scale in screen, generally choose integer scale to be convenient for calculating.

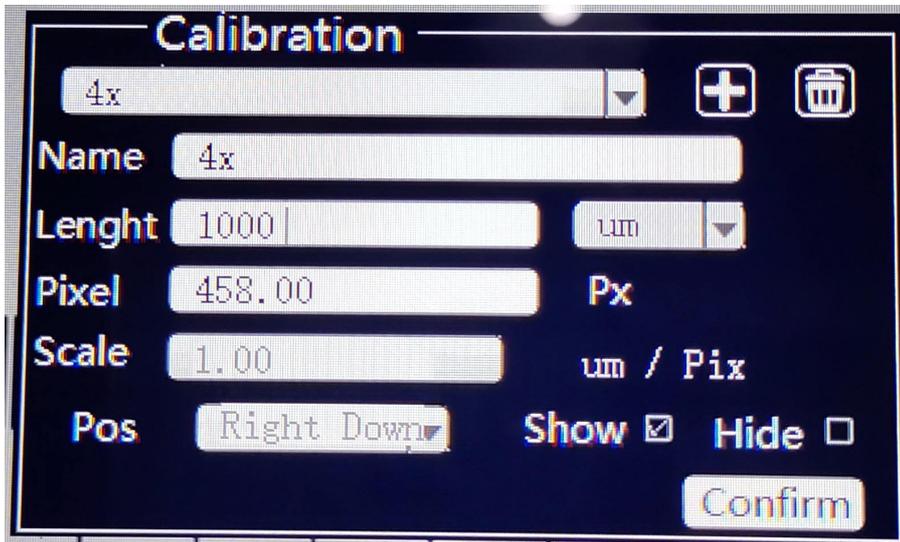
For example: It is the calibrating line for 4X objective. click one point to define the start point, then click to another point to determine the final one:



Calibrating line shows 458.00px, loosen the mouse and the parameter can be filled out automatically in the Pixel frame.

Enter the number to the dialog box according to the actual length. The calibrating line crosses 100 scales in the micrometer means the actual length of the calibrating line is 1000 μ m, and fill 1000 in the Length frame, and choose μ m for unit.

After that, the scale frame will be filled out automatically after auto calculating.



3.1.3.3 Click “Confirm” to finish the calibrating.

Repeat the above to establish another calibrating name for another time objective

3.1.3.4 The position of the scale bar for POS in the screen can be chosen to be shown (Left upper corner, right upper corner, left lower corner or right lower corner)

3.1.3.5 Select “show” to show the scale bar and select “hide” to hid the scale bar

3.1.3.6 Click the button  to delete the calibration



For the sake of the environment, please dispose of the packaging waste etc. properly after the product is unpacked and installed, and do not abandon it at will. Thank you for your cooperation!