High Definition Video Microscope

Manual of Use

Technical Features

Specification	Model	**756460** **Smartscope**
	Series	Measurement HDMI Industrial Camera
	Sensor size	SONY IMX335 sensor，1/3 Inch
	Effective pixel	Full HD
	Frame rate	1920*1080P@ 60FPS
	Output	HDMI , USB2.0 Type-A, minicard slot
	Pixel size	2.0μm*2.0μm
	Power	DC-12V/2A
Features	Mark function	Point coordinates, Reticle, Coordinates, Text annotation
	Length measurement	Straight length, broken line length, curve line length, distance between parallel lines, point-line distance
	Center distance of circles	Radius setting circle, two points setting circle, three points setting circle
	Geometric measurement	Line length, radius setting circle, two points setting circle, three points setting circle, concentric circles
	Geometry area	Polygon, rectangle
	Image capture	Supports static photos
	Video record	Support 1080P@30 video
	Network video	no
	Other features	Horizontal/Vertical mirror, Flip, Monochrome color, Image freeze, Image contrast
Package	Accessory	Mouse, DC-12V Power adapter, HDMI cable

Production Picture

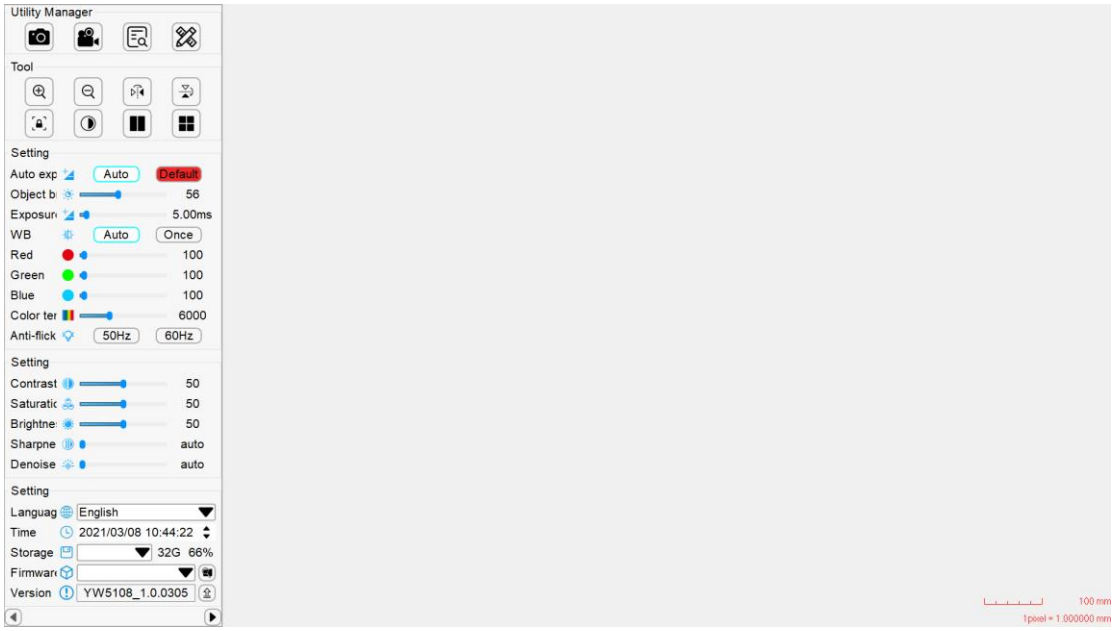
Function menu

Boot Screen

Connect the power adapter（12V/2A），the camera starts up and displays the boot screen as belows：

Main features

User move the mouse to left or right after picture display, the main interface pops up(as picture)



Assistive tools

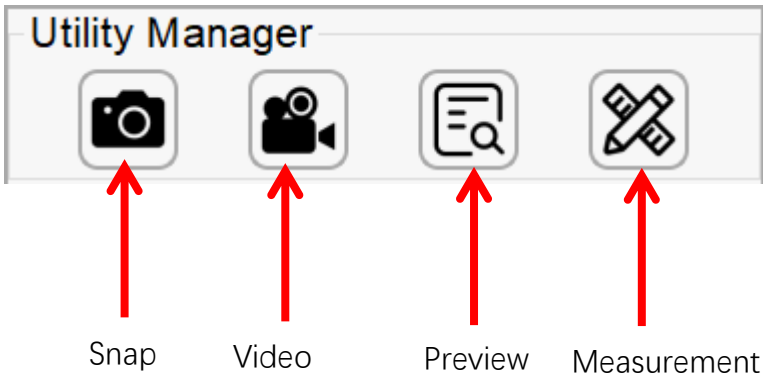
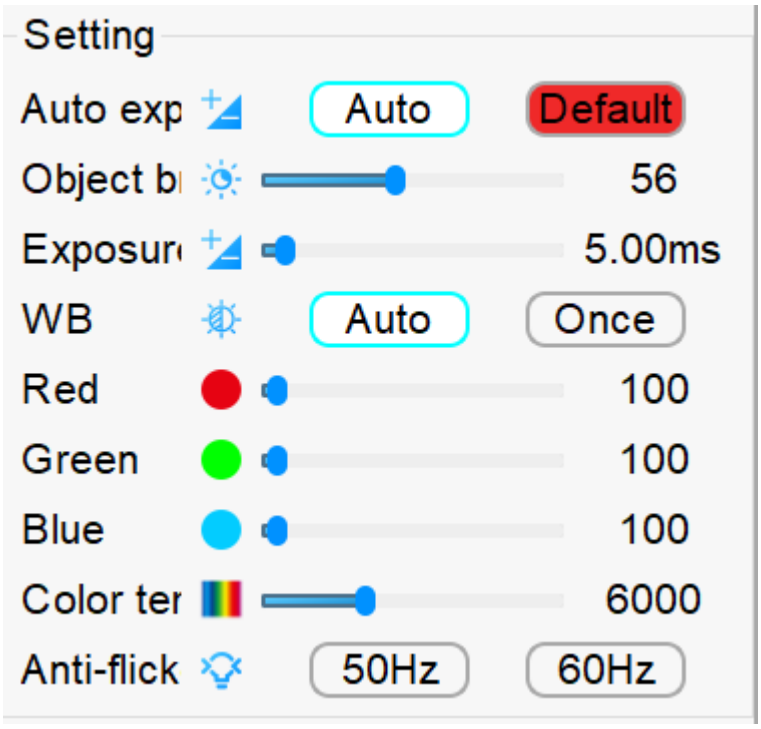


Image tools

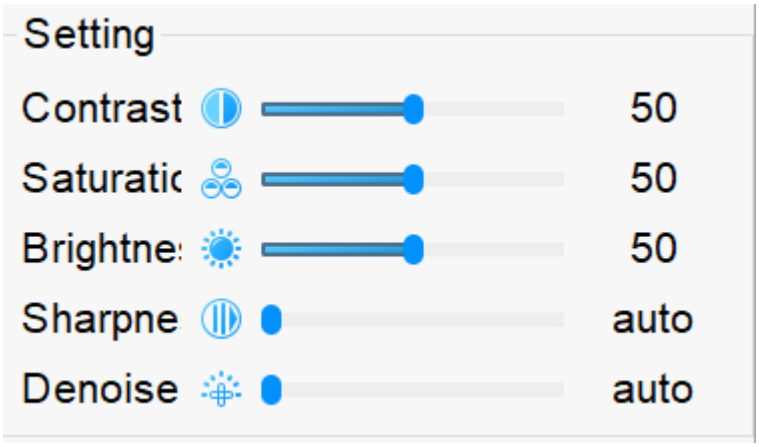
The icons are in order as above: Zoom in, zoom out, Mirror, Flip, Freeze, Monochrome, Contrast(Click to compare the image from external storage facility with the live image of video)、Four images contrast：Click the button, and four image will display, double click one of images, the image will be frozen. Double click the image again, unfreeze the image. This helps to compare the products from different angle.

Parameter setting



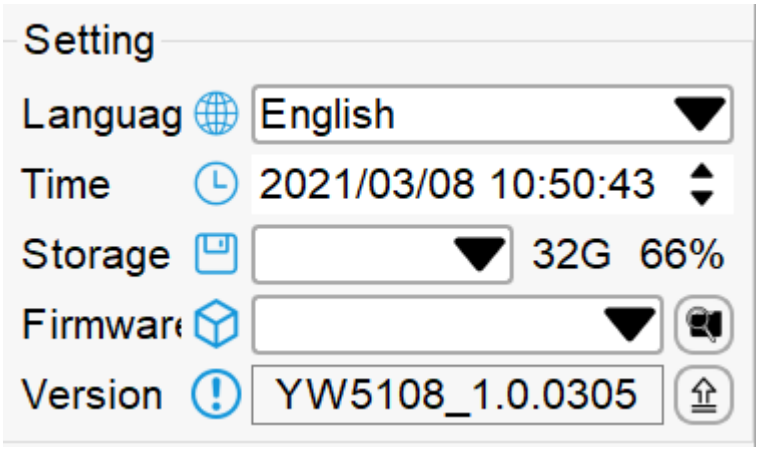
Move the mouse to drag the corresponding slidebar under this menu, it can adjust the parameters of the image. If there is a deviation on automatic exposure or automatic white balance, the user can adjust target brightness and exposure time manually to adjust image brightness. At the time of light stability, click one push to adjust the white balance, which can not do auto white balance after calibration no longer

Image setting



Under this menu, you can drag the progress bar by the mouse to adjust the parameters of relevant images

System setting



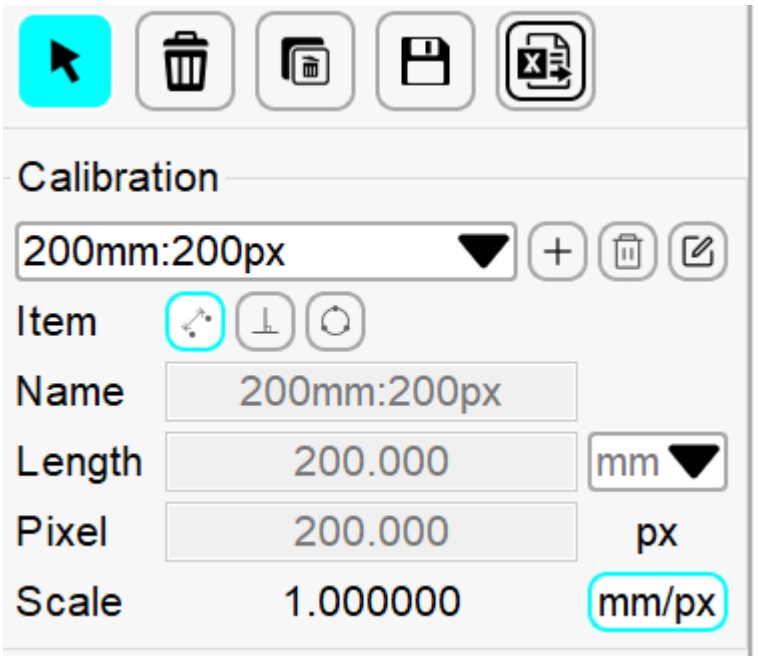
Under this menu, user can set up language, time. View the information of external storage device, camera model, firmware and version. (For time adjustment, the mouse can move to the corresponding position and scroll the mouse wheel to set the corresponding time.) The left and right arrows represent the display position of the switch menu.

Shortcut

A. Right-click the photo button under the main menu by the mouse, user can set up the camera timer function, and set up the corresponding interval time and quantity of photos.

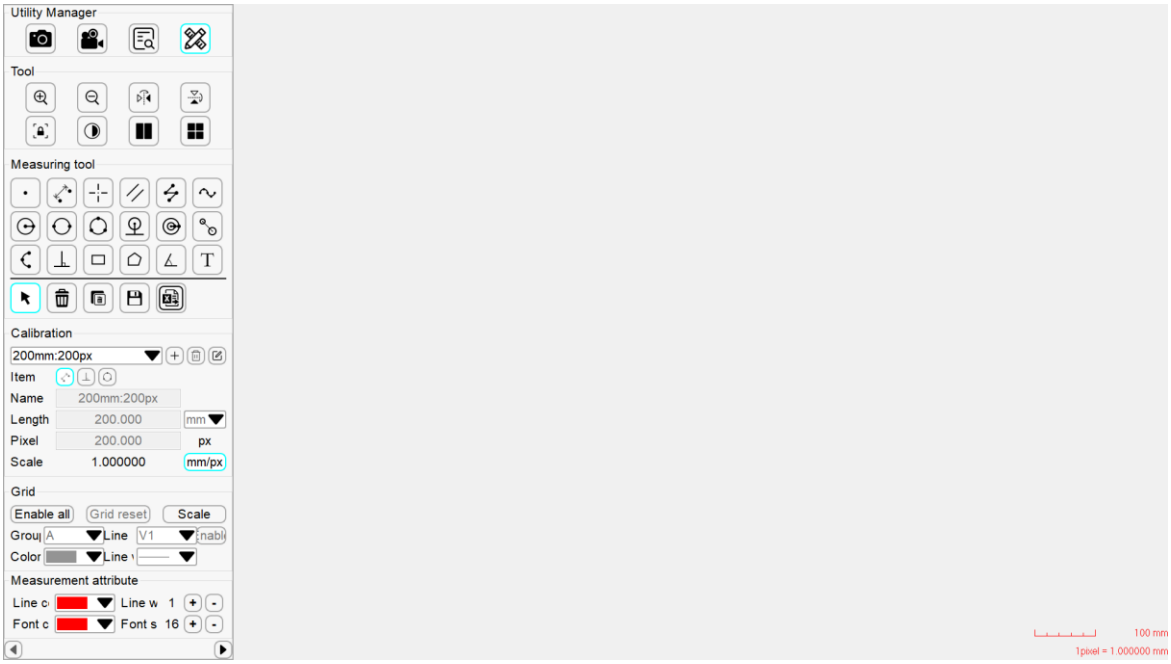
B. Click the mouse wheel under the main menu to set the photo format (Snap the photo by BMP format, it takes longer time, MJP format is system default)

C. Click the button mm/px in the measurement interface, turn on or off the image scale function



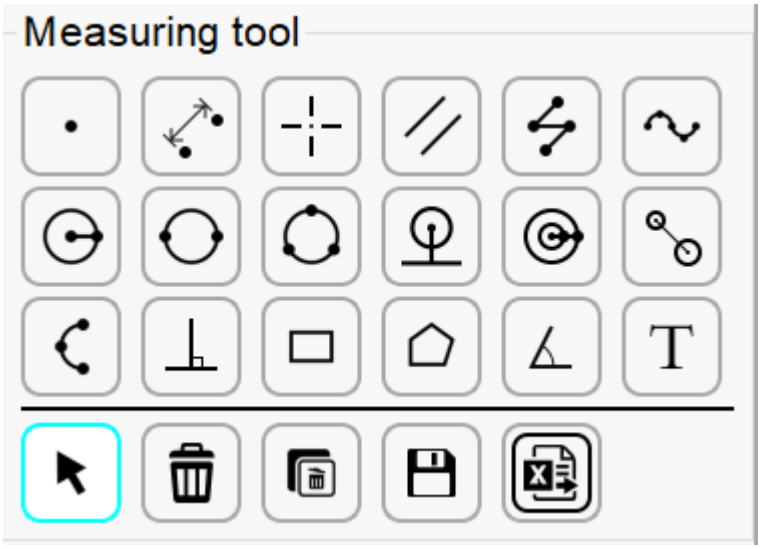
D. In the preview state, user scroll the mouse wheel to realize the image digital zoom in and out function quickly.

Measurement function



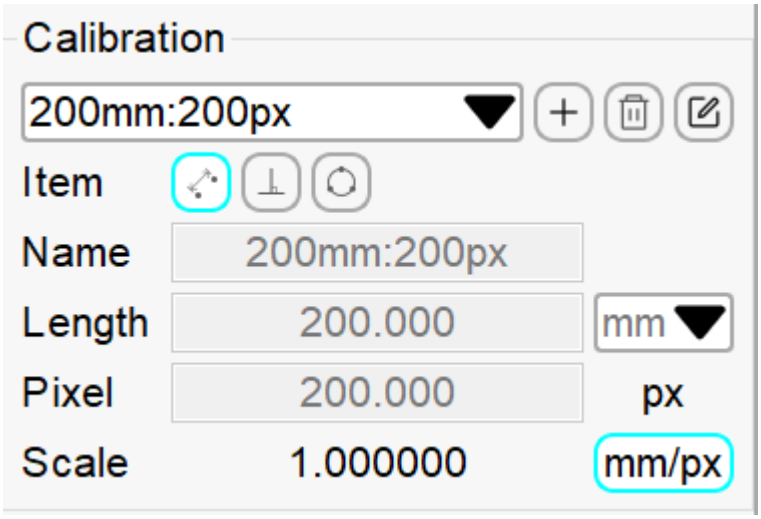
Click the measurement icon to enter the measurement interface, the system provides up to 20 kinds of measurement graphics

Measuring tools



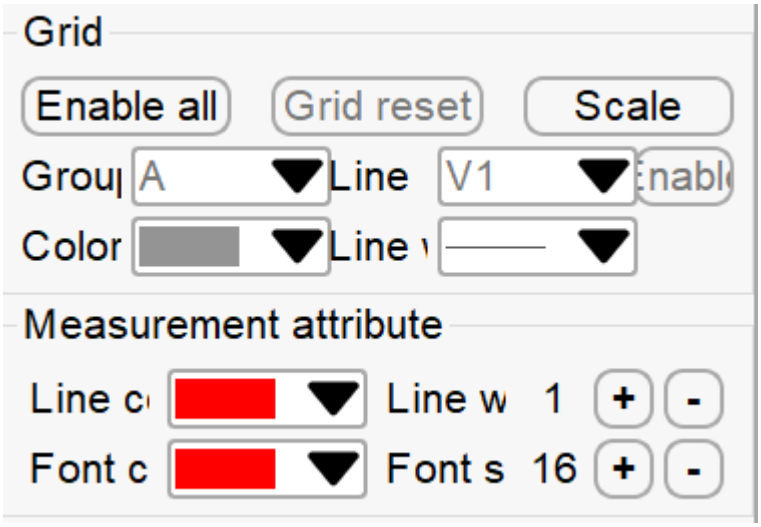
Under this menu, user can delete the measurement graph, delete a single image, delete the screenshot of the measurement image or export the data, etc

Calibration setting



Click the button  to set up the calibration, the user can choose the line and circle calibration alternatively. Input the calibration name in the corresponding name blank, on the preview interface to draw a standard length of the line or circle according to the actual length, and input the number in the length column, then confirm and select the corresponding unit, Click the save button again to complete calibration adding.

Grid line setting



Click the "All" button to turn on 8 horizontal and vertical scale lines. User can turn on or off any grid line base on your need. User can also set up the color and thickness of each line. Under the "Group" option, it can save 8groups of grid lines, which is convenient to open the set grid lines quickly when testing the product.

In the measurement property, user can select the width and color of the graph line, select the size of the font color of the measurement information.

BMS Microscopes