

1080P HDMI Video Camera

Manual



HDMI-200M

With 8 GB USB Flash Drive and Built-in Measurement Software



Lanoptik Technologies Ltd

Important Notes

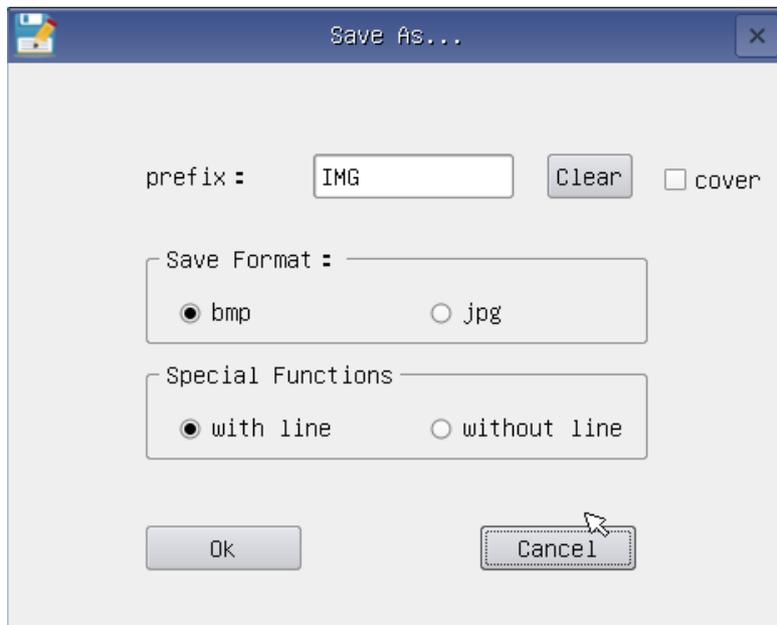
- HDMI cable is for connecting the camera to displayer. The camera requires LCD screen with resolution as Full HD 1080P. The size of displayer must be above 21.5 inches. 17 or 19 inch displayer may not work properly.
- Connect the 12V DC power supply.
- Connect a USB mouse to a USB port of the camera, and insert a USB memory card to the other USB port of the camera.

Function Introduction

1. Basic function setting



1.1. Click the **File** button, pop-up **Save as** menu, click **Save as** menu, appears the following interface.

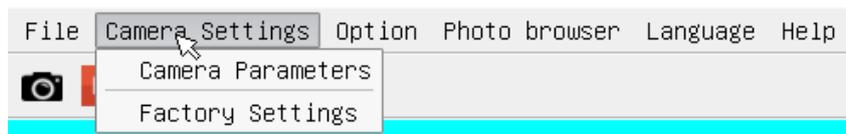


The button of **Prefix** can set the prefix name which camera images stored, user can change it.

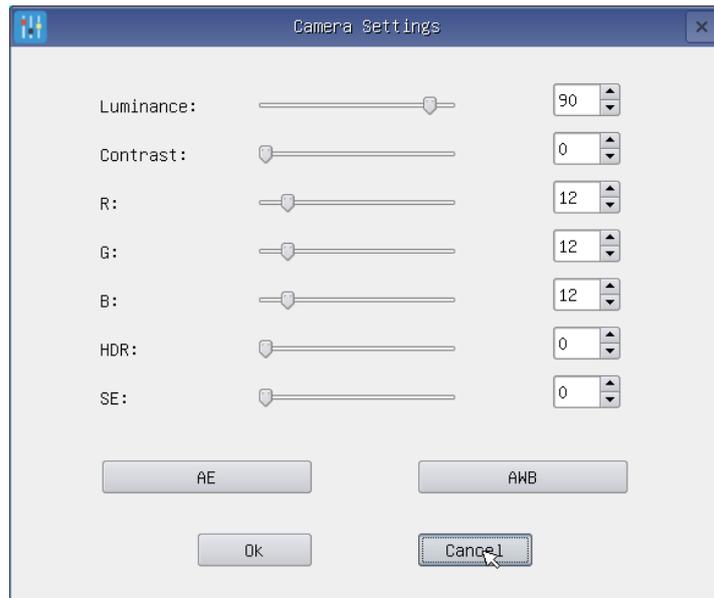
Save format: User can select **BMP** or **JPG**.

Special Functions: If the camera store photos need to retain the measurement of drawing and measuring results, User can select **with line** or **without line**. The mode of **with line** can keep the measurement results, and the mode of **without line** can only take a simple photo shoot.

1.2. When you click the button of **Camera settings**, appears the following interface.



Click the button of **Camera parameters**, appears the following interface.

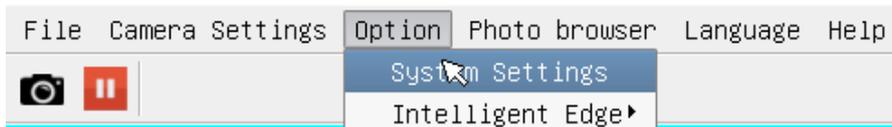


Some of the basic parameters of the camera are required in this dialog box settings, including **Luminance**, **Contrast**, **RGB** color, **Component**, **HDR** wide dynamic model, **SE** image enhancement mode, **AE** auto exposure and **AWB** auto white balance.

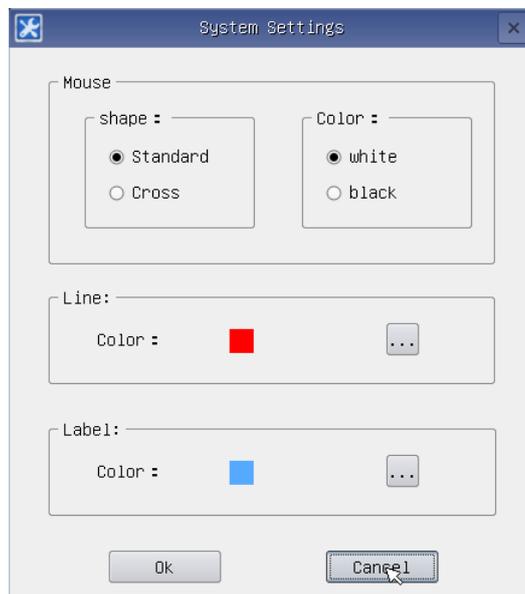
NOTE:

- When you look at the general image, **contrast** suggest the default is 0 level. If you need to see some problems such as low glass surface etc. The contrast of the object, only need to adjust contrast series.
- **HDR** function has strong reflecting image when looking at the proposal to open, is divided into 4 levels.
- **SE** function normal suggested default to level 1, opened the series is too high image easily generate noise.

1.3. Click the button of **Options**, appears the following interface.

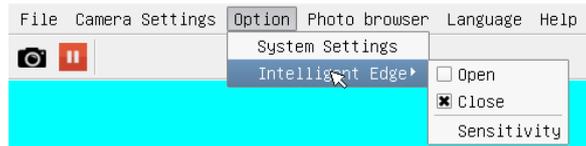


1.3.1. Click the button of **System Settings**, appears the following interface.



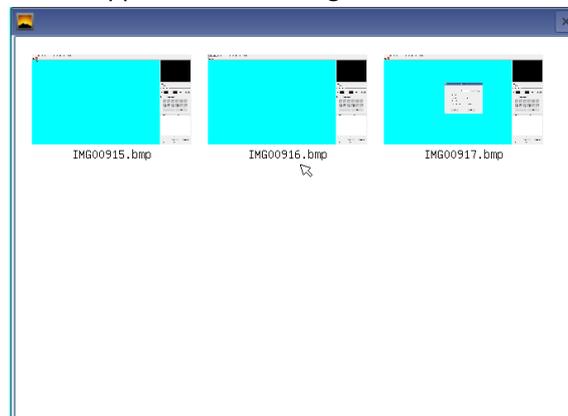
In the dialog box of **mouse**, user can change the shape or the color of the mouse,
In the dialog box of **line** (measured by drawing lines), color can be a variety of settings,
In the dialog box of **label** (measurement results), Color can also be a variety of settings.

1.3.2. Click the button of intelligent edge, appears the following interface.



You can **open** and **close** the **intelligent edge** searching function. When user open **intelligent edge** searching function, if on the edge of the induction is not very sensitive, User need to adjust the **sensitivity**. Open the function, if user put the mouse into the local image contrast larger (observe the edge of the object in the display), the upper right corner of the cross which will be changed from green to red.

1.4. Click the button of **Photo browser**, appears the following interface.



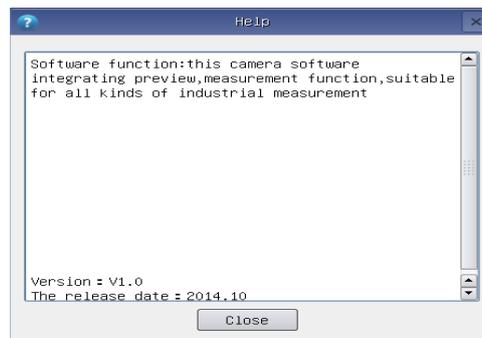
User can browse every photo on the U disc (USB Flash Drive)

1.5. Click the button of **Language**, appears the following interface.



At present, the measuring software supports two Chinese and English language.

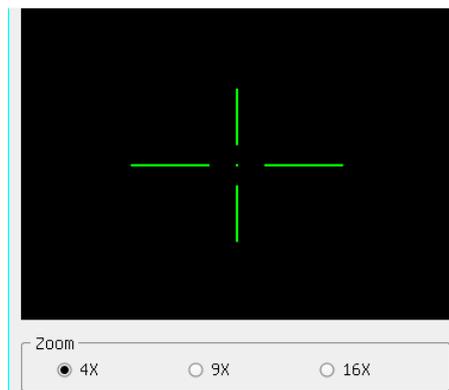
1.6. Click the button of **Help**, appears the following interface.



It introduces the measuring software version number and release date.

2. Advanced functions settings

2.1. Zoom select.



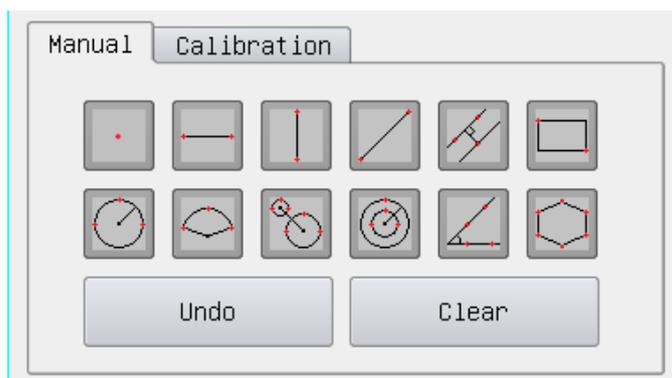
The rate refers to the small video window from the left side of the upper right corner of the window magnification, a total of 4 times 9 times and 16 times in three modes.

2.2. In the following diagram



Numerical X Y in the box is the position information of the current mouse in the video window, **Metric** window has four units of measurement: mm, um, inch, mil.

2.3. Manual



Mark on the measurement object, the labeling results for the current marking point coordinate information;



Measurement of the horizontal line segment;



Measurement of the vertical line segment;



Any angle measurement;



Measurement of parallel line spacing;



Rectangular measurement;



Circle measurement, by using the three point calibration method;



Fan-shaped measurement, by using the three point calibration method;



Measurement of the center distance between two circle;



Concentric circle distance measurement;



Angle measurement;



Polygon in polygon measuring, measuring, last side click the right mouse button, the software automatically completed the drawing work;



Undo

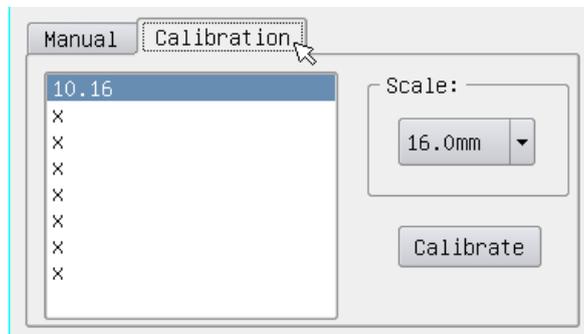
Click on the **Undo** button, the software will take a recent delete operation;



Clear

Click on the **Clear** button, the software will delete all of the measurement operation;

2.4. Calibration

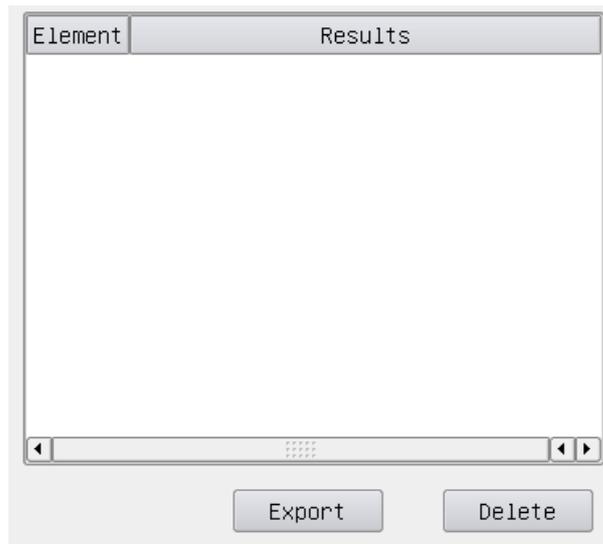


The camera need to re select or calibrate size when replacing the lens magnification, the specific process is as follows:

- a) Firstly click on the button **Calibration**, the calibration sheets in under the lens and adjustment of the focal length, which makes the calibration sheet round can show.
- b) Secondly, in the calibration of 8 discs in the selection of a suitable circle, select the corresponding size from the **Scale** button. Use the three point circle manner after the completion of calibration, calibration, select double-click on 8 X left, and input a name, then click enter button. Then the calibration work is finished.
- c)

NOTE: For a plurality of lens magnification, in the calibration time can one to a plurality of magnification calibration, and save a plurality of different name, next time when replacing the lens magnification, only need to select the corresponding calibration name, there is no need to re calibrate.

2.5. Element and Results



This page can be saved to the current measurement procedures and measurement results of statistics, **Export** function can be the measurement results will be the current export to U disk save. Select a measured element delete function, click the **Delete** button, the software will measure the part corresponding in the image on the delete.

2.6. This page is a hint for the camera with U current state information, including the total capacity and residual capacity

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Udisk Capacity:3816M Used:52M Free:3764M
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