Euromex VC.3036 Supplementary User Guide

Chapter 1 Introduction

Advanced Design

Euromex Microscopen B.V has released the new generation scientific color cameras--the Euromex VC.3036. With the amazing color fidelity, the Euromex VC.3036 provides a perfect solution for the high definition scientific photography. To meet the customer individual requirements, the flexible parameter settings allow you to quickly get wonderful live images easily and freeze the screen simply to observe the details.

The Euromex VC.3036 inherits all the advantages of the first generation VC.3035 cameras and significantly improve both the hardware and software, brings more fluent visual experience and intuitive user interface.

To get more information about the Euromex VC.3036 camera, please read this document completely.

Chapter 2 System Standard Items

One Euromex VC.3036 camera,

One 12V2A power adapter,

One HDMI cable (2-meters length),

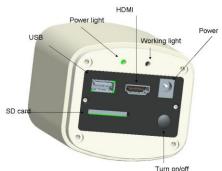
One SD card (8G capacity, class 10),

One mouse (with 1.5-meters cable),

One USB2.0 cable.

1. USB interface:

Connect the USB port to a PC to make the camera works as a **Driver-Free** camera. Use ImageFocus software to control it (similar as using the other Euromex so cameras).



Note: No driver installation is needed when connecting the Euromex VC.3036 to PC via USB port.

<u>Warning! Do not connect any other devices using this cable, it can cause</u> serious damage to your hardware

2. HDMI interface:

- A) Connect a mouse to the USB port. Use the mouse to control the camera directly(via HDMI only).
- B) Use the HDMI cable to connect the Euromex VC.3036 to the monitor. Image data is transferred and displayed on the monitor according to the HDMI protocol.

3. Power interface:

Please use Euromex provided 12V2A power supply. When power supply is plugged in, the red light will turn on. When the camera is turned on, a blue light will turn on.

4.ON/OFF key:

Press and hold the ON/OFF key until the blue light turns on (or off) to turn on (or off) the Euromex VC.3036 camera.

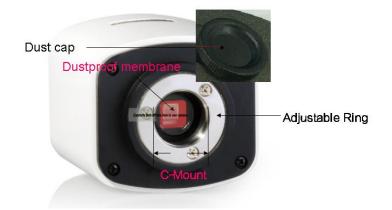
5.SD card:

To get faster and more stable data transfer, recommend to use Class10 SD card.

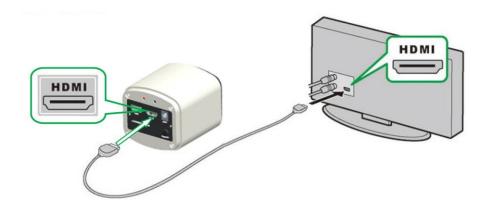
6.Anti-dust seal:

Please remove the seal when first time use the camera.

Due to QC pre-shipment inspections the seal can already be removed.



Chapter 3 HDMI Operation

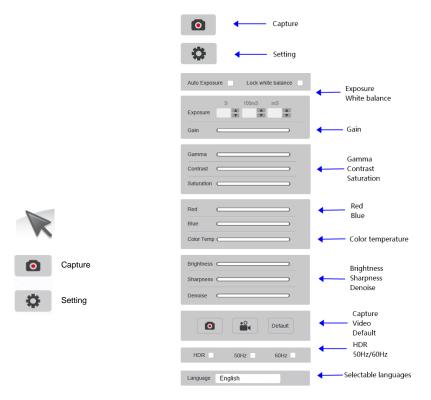


Step 1. Connect the camera.

- 1. Plug in the 12V2A power supply. Use HDMI cable to connect the camera to the monitor. Press and hold ON/OFF key until blue light is on.
- 2. Connect the mouse to the USB port. Move the cursor to get the settings on the screen.
- 3. Insert the SD card. Capture images or videos to the SD card.

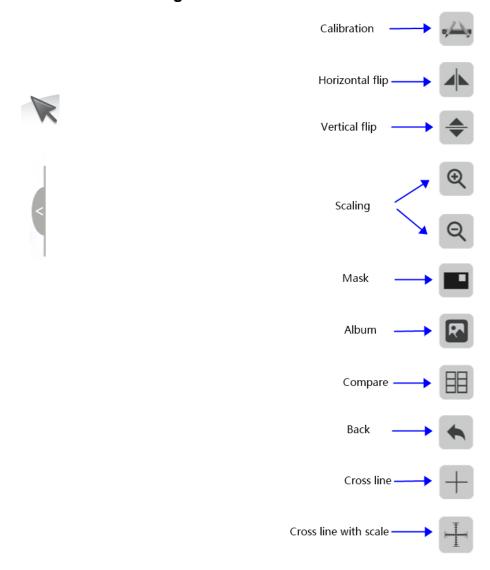
Step 2. Move the cursor to the left of the screen.

When move the cursor to the left of the screen, 'Capture' and 'Setting' icons will appear (See image on the left hand side). Click 'Setting' to get parameter setting menu (See image on the right).

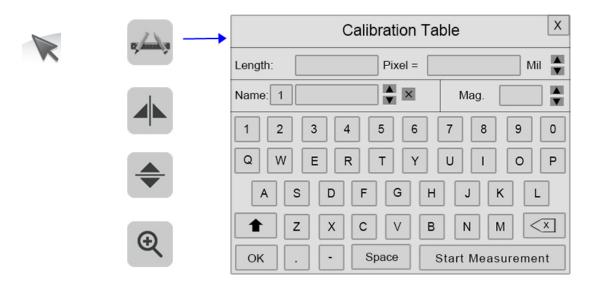


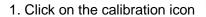
Selectable languages, includes English, Chinese, German, Italian, French, Japanese, Korean.

Step 3. Move the cursor to the right of the screen.



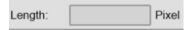
Calibration and measurement in HDMI mode:







- 2. Move the cursor out of the calibration table to start the calibration.
- 1) The live image should be the calibration slide or some know dimensions specimen at this moment.
- 2) Draw a line to get a reference length, and enter the length value in calibration table



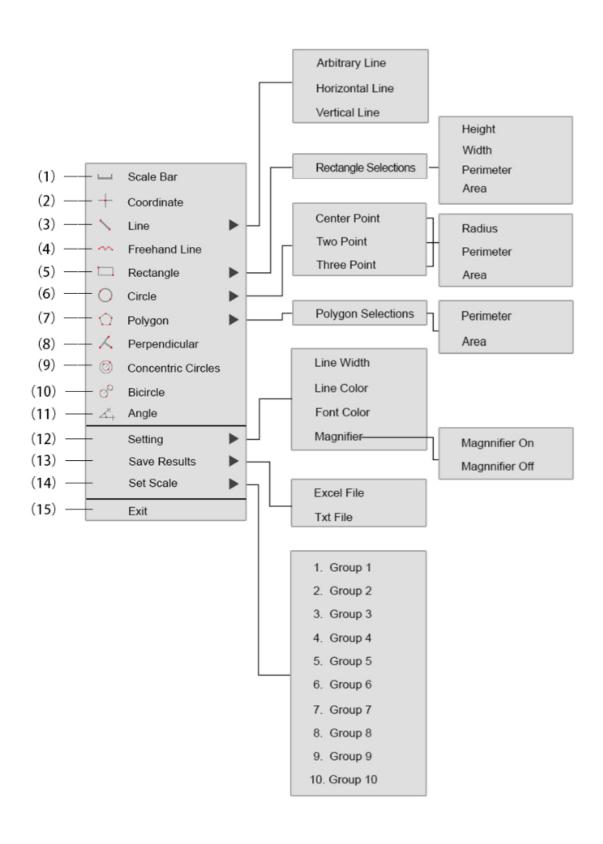
Five units options available: MIL, CM,MM,UM and INCH.

- 3. Select the objective magnification in Mag., and it can also fill in one extra group Mag. value if needed.
- 1)This data just need to be entered if the user will use the same camera to get images at different objective settings and do the measurement for them.

In this case, no need to create calibration files for images at all the objective settings, just change "Mag." to get the corresponding calibration file.

- 2)If only need to use one objective in application, select "N/A"
- 3)If can not find suitable objective magnification from list, it can use keyboard to fill in one extra group mag. value directly.
- 4. Enter a name for the newly created calibration file

 And it allows to create 10 groups calibration flies.
- 5. Click to complete the calibration settings.
- 6. Click Start Measurement to go to the image measurement page.
- 7. Right-click anywhere on the live image to get the measurement menu.



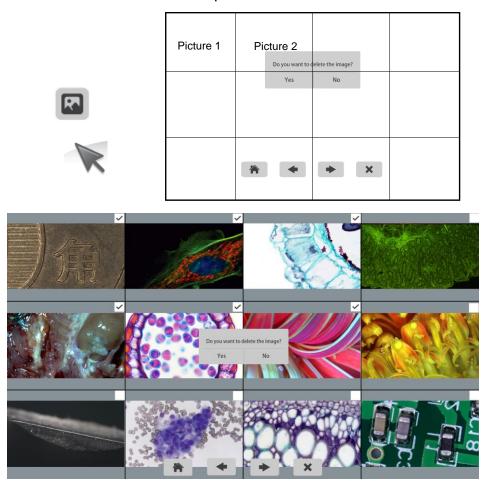
1	Scale Bar	On/off the scale bar on the picture
2	Coordinate	Get the coordinates of the selected points
-		•
3	Line	Arbitrary, horizontal and vertical line measurement.
4	Freehand Line	Get a freehand line length.
5	Rectangle	Measure rectangle perimeter and area.
		Selectable to have the data of height, width, perimeter or
		area.
6	Circle	Center Point: Use center point and point on the circle to
		draw a circle
		Two Point: Draw a circle according to the diameter.
		Three Point: Use 3 points on the circle to draw a circle.
		Selectable to have the data of radius, perimeter or area.
7	Polygon	Measure polygon perimeter and area.
		Selectable to have the data of perimeter or area.
8	Perpendicular	Measure the perpendicular length.
9	Concentric circles	Get the diameters of the two concentric circles.
10	Bicircle	Get the distance between two circles' center points.
11	Angle	Measure the angle.
12	Setting	1)Set the measurement line width, color and font color.
		2) Magnifier On/off: Switch on/off the magnifier.
		When switch on the magnifier, the cursor located area will
		be zoomed in and placed at the corner to help accurately
		locate the measurement point.
13	Save Results	Select to export the measurement results to a excel or
		text file.
		The exported results will be saved in the
		SD card\MEASURE folder.
14	Set Scale	It allows to create 10 groups calibration files in calibration
		table, and the user can select 10 groups files to do
		measurement.
15	Exit	Exit the measurement.
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Note:

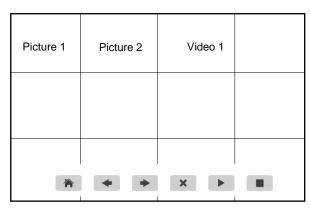
All the measurements on the live image will be removed when exit the measurement. The measurement result can be saved on the captured images when click capture button.

Step 4. Check the photo album and videos

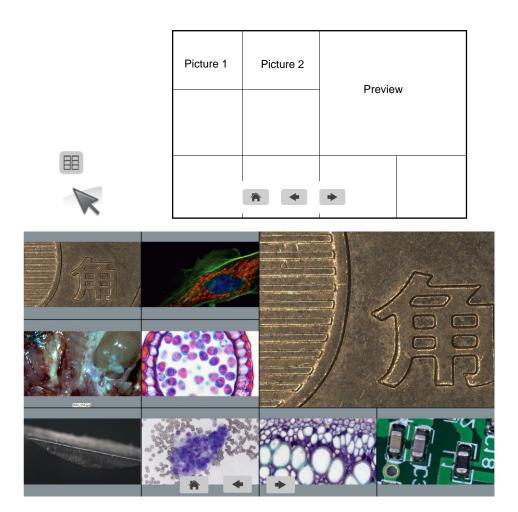
1. Check the album and delete the pictures.



2. Check the video and delete the video. To delete the video successfully, be sure this video is not in use.



Step 5. Compare preview with the captured images.



Chapter 4 Connecting the Euromex VC.3036 to a computer

- (1) Use USB cable to connect the the Euromex VC.3036 to the PC.
- (2) Plug in the 12V2A power supply. Press and hold the ON/OFF key until blue light is on to turn on the camera.
- (3) No driver installation is needed when connected to PC. Install ImageFocus to adjust parameters and acquire images.

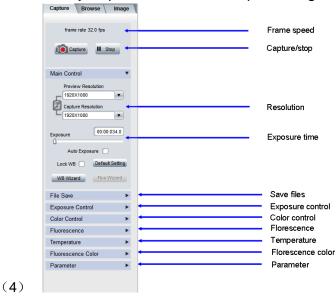


Fig.4-1. The left side of ImageFocus

(1) Start the ISC. The parameter settings are shown on the left side of the software. See Fig.4-1.

Note: When use 'Lock WB' Lock WB , it takes 3 seconds to make sure the camera finish the initialization.

- (2) Switch the Frame Speed Normal High in 'Exposure Control' tab to get different frame rate. In Normal mode, the image quality is better than High mode. To get faster frame rate, please select High mode.
- (3) Functions 'Fluorescence', 'Temperature Control' and 'Fluorescence Color' are not available for the Euromex VC.3036 camera. These functions are gray out when the Euromex VC.3036 camera is attached.

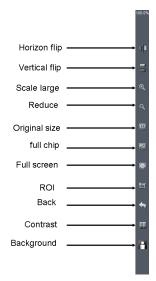


Fig.4-2. Function shortcuts on the right side of ImageFocus



Fig.4-3. Captured image thumbnails

- (1) Users can double click on one image thumbnail to display it. Click on the little triangle button to get more captured image thumbnails.
- (1) Furthermore, you also can select one or more images and delete them.



Fig.4-4. Imaging processing

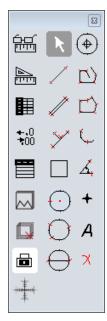


Fig.4-5. measurement

- (1) Click on tab, get the image processing functions (Fig.4-4).
- (2) Provide Focus stacking, HDR, Fluorescence Combination functions etc.

Note: When camera is disconnected, all the image processing functions will be gray out.

- (3) Click on Measure tab to get measurement functions (Fig.4-5).
- (4) It is allowed to apply measurements to the live and still images. To get more details about measurement, please read the ImageFocus software manual.



Fig.4-6. About ImageFocus

If have any questions, please Click on 'Help' to get Euromex support information.

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Cleaning

Cleaning is a delicate matter, we advise users to clean the optical port as little as possible.

When the camera is NOT in use, please screw in the dustproof cap to avoid the dust from the environment accumulating on the optical port.

When get dust accumulated on surface of the optical port, recommend to use a blower bulb to blow away the dust first. If it is still there, please use a very soft lint free cloth (Micro Fiber cloth) with absolute ethyl alcohol or similar cleaning agent to gently clean the surface.

If find the dust inside the camera, please DO NOT open the camera case by yourself. Please contact Euromex support team to get further advice.

Maintenance

Only Euromex microscope B.V. is allowed to open the camera case for maintenance. If repair is needed, please contact the customer support team.

CAUTION: Please DO NOT open the camera case and assemble it back by yourself. If assemble the camera by yourself, it will easily bring dust and moisture inside the cameras. Any sensor scratch or moisture issue brought by opening the camera case by yourself is not covered by the warranty.

