HY-3699

User Manual

Parameter

Specification	Model	HY-3699
	Image Sensor	1/2.8" Sony IMX415 CMOS 8MP
	Pixel Size	1.45x1.45μm
	HDMI Output Resolution	1920x1080P @60FPS
	Recording Resolution	3840x2160P@ 30FPS (4K)
	USB Output Resolution	1920x1080P @30FPS
	LAN Output Resolution	1920x1080P @30FPS
	Output Interface	HDMI, Type-C, USB, LAN
Features	Marking Feature	Point coordinates, crosshairs, coordinate systems, text annotations
	Length Measurement	Line length, polygonal line length, curve length, parallel line distance, point to line distance
	Centers Distance	Radius defining circle, two point defining circle, three point defining circle, concentric circles
	Geometric Measurement	Line Length, radius defining circle, two point defining circle, three point defining circle, concentric circles
	Geometric area	Polygon, square
	Snap	8MP Still Image
	Record	Support 2160P Recording
	Network Video	Support RTSP Streaming, RJ45 Interface
	Other Function	Vertical rotation, horizontal mirroring, Monochrome images, frozen images, image contrast
Packing	Power Adapter	DC-12V/1A
	Weight	0.35kg

| Standard Accessories | Mouse, DC-12V Power adapter, HDMI Cable |

Product Instruction

1. Connect the mouse to USB interface, connect the camera to monitor by HDMI cable, plug in the 12V power adapter.
2. When the LED flashing, the camera is running, please wait for the image display on the monitor.
3. Move the mouse to the lower-left corner of the monitor to bring up the menu.
4. Type-C interface for computer connection
5. You need to turn on UVC function under HDMI mode to connect the camera with computer.
6. Network connection tutorial on the last page of this manual.
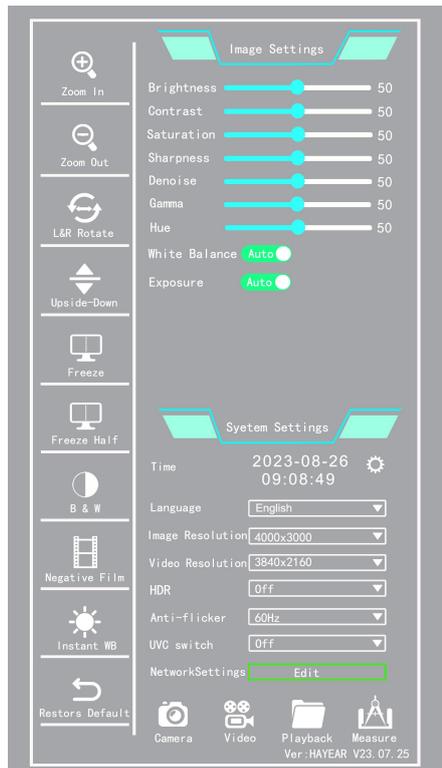
Function introduction

Primary function

 Camera: Click to save the image to storage device.

 Video: Click to start recording, click again to stop recording and save the video to storage device.

 Playback: Click to check the images and videos in the storage device.

 Setting: Click to bring up the time & date setting function.

 Measure: Click to bring up the Measurement Function Menu

Measurement Function

Click "Measurement" button to bring up the Measurement menu as below
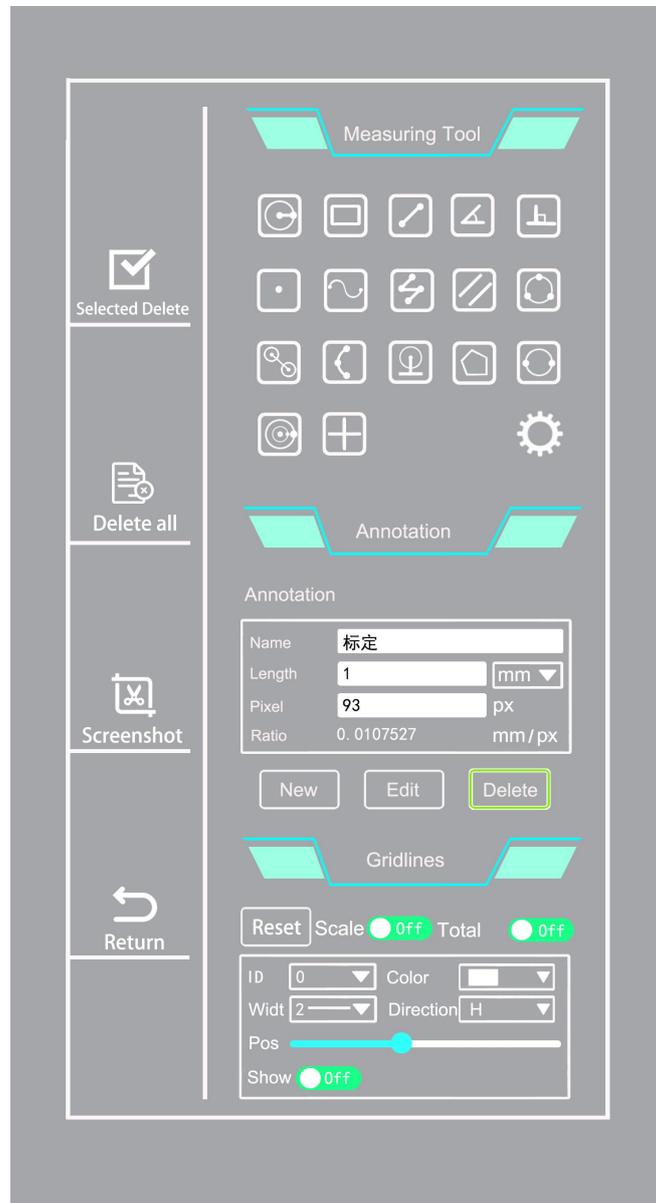
Calibration Tutorial

Before measuring, we need to make the calibration based on current microscope magnification and image preview resolution, then we can get the accurate measuring data. Please move to HAYEAR official website for detailed operation video.

Click Measure - Annotation - New to enter the calibration

Click Annotation - Edit to enter calibration list
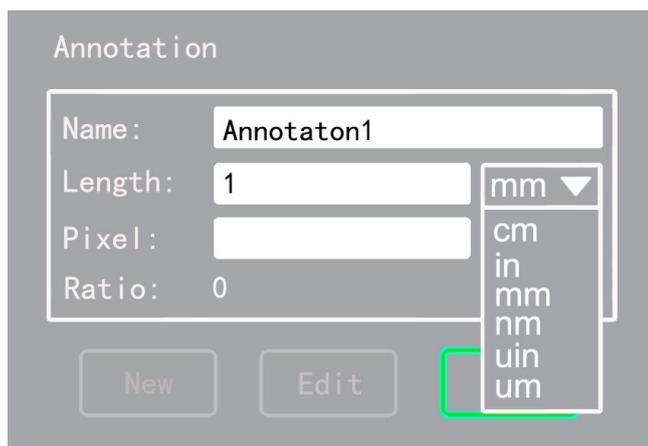
1. Input the corresponding content in the Name option.

2. Input the number in the Length option based on the actual length, and select the length unit. (cm/in/mm/nm/uin/um)

3. Click the mouse to determine the starting point, and click again to finish, the pixel length of the line will be automatically displayed on the screen. (As the sample image: 706.000px)

4. Enter the corresponding number in Length according to the actual length, and select the actual length unit in the Unit box (4.000nm in the sample image)

5. The calibration system will automatically calculate the ratio based on the actual length and pixel length.

6. Click "Done" button to finish the calibration.

7. Then the measure function is ready to go.
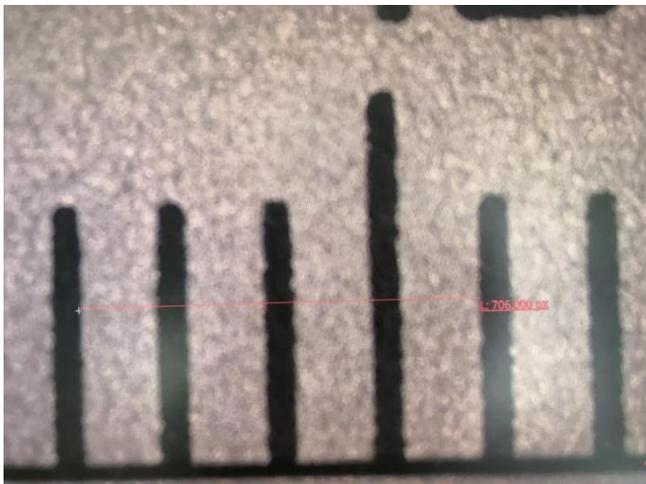
Network Setting

1. Connect the camera to computer LAN interface via LAN cable.

2. Click the Network Settings on the screen in HDMI mode.

3. The default IP allocation method is DHCP, and the initial IP address is 127.0.0.1, wait for about 3 minutes.

Then click the edit to observe the IP is not 127.0.0.1 but 169.254.x.x means that the camera obtains IP successfully.

4. Open S-EYE software and click Network cameras - Select RTSP - Change the URL from rtsp://ip/camera/video to rtsp://169.254.x.x/camera/video - Click Connect button to create the connection.