The WUCAM1080PA Series Camera Help Manual

Contents

1 The Application of the WUCAM1080PA Series Camera

Figure 1- 1 WUCAM1080PA Series Camera

The WUCAM1080PA series camera is intended to be used for the acquisition of digital images from the stereo microscope, biological microscope or online interactive teaching. The basic characteristics are listed as below:

2 WUCAM1080PA Series Camera Datasheet and Functions

Order Code	Sensor & Size(mm)	Pixel(μm)	G Sensitivity	FPS/Resolution	Binning	Exposure(ms)
WUCAM1080PA	Sony IMX307(C) 1/2.8"(5.57x3.13)	2.9x2.9	1300mv with 1/30s	50@1920*1080(USB) 50@1920*1080(WiFi)	1x1	0.01~1000

Figure 2- 1 Available Ports on the Back Panel of the Camera Body

Interface and Indicator	Function Description
Micro USB	Connect to 5V power supply with Micro USB cable, Camera provides WiFi AP connection mode; Connecting to PC with Micro USB cable, Camera provides UVC function
WiFi LED	WiFi function indicator
PWR LED	Power indicator
Video Output Interface	**Function Description**
USB Video Interface	Connecting USB port of PC for video transfer; MJPEG format video, supported 50fps@1080P
WiFi Interface	Support 802.11b/g/n protocols in AP mode; 50fps@1920*1080 H264 encoded video and Jpeg image capture; support up to 3 clients, 1 client connection is the best
Other Function	**Function Description**
Color Technique	Ultra-Fine Color Engine
ISP Function	Exposure(Automatic / Manual Exposure) , Gain， White Balance(Automatic / Manual / ROI Mode)， Sharpening， 3D Denoise， Saturation Adjustment， Contrast Adjustment， Brightness Adjustment， Gamma Adjustment， Color to Gray， 50HZ/60HZ Anti-flicker Function, Anti-flicker， Mirror/Flip
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK
Recording System	Still Picture or Movie
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory: 4GB or More

	WiFi Adaptor: Support 802.11 b/g/n
	Display:19" or Larger
	CD-ROM
Operating Environment	
Operating Temperature (in Centidegree)	-10°~ 50°
Storage Temperature (in Centidegree)	-20°~ 60°
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	USB DC 5V/1A Adapter

3 WUCAM1080PA Series Camera Packing Information

Figure 3- 1 WUCAM1080PA Series Camera Packing Information

Standard Packing List			
A	Gift box : L:17.4cm W:17.4cm H:7.6cm (1pcs, 0.54kg/ box)		
B	WUCAM1080PA		
C	Power Adapter: Input: AC 100~240V 50Hz/60Hz, Output: DC 5V 1A American standard: Model: POWER-U-5V1A(SK12G-0500100U): UL/CE/FCC European standard: Model: POWER-E-5V1A(SK12G-0500100V): UL/CE/FCC		
D	Micro USB data cable 1.5m		
Optional Accessory			
E	Adjustable lens adapter	C-Mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108001/AMA037 108002/AMA050 108003/AMA075
F	Fixed lens adapter	C-Mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108005/FMA037 108006/FMA050 108007/FMA075
	Note : For E and F optional items, please specify your camera type(C-mount, microscope camera or telescope camera), ToupTek engineer will help you to determine the right microscope or telescope camera adapter for your application;		
G	108015(Dia.23.2mm to 30.0mm Ring)/Adapter rings for 30mm eyepiece tube		
H	108016(Dia.23.2mm to 30.5mm Ring)/ Adapter rings for 30.5mm eyepiece tube		
I	Calibration kit	106011/TS-M1(X=0.01mm/100Div.) 106012/TS-M2(X,Y=0.01mm/100Div.)	

		106013/TS-M7(X=0.01mm/100Div., 0.10mm/100Div.)

4 Software and App

For Windows user (Windows XP (32bit), Windows 7/8/10 (32/64 bit)), please use ToupView.

For macOS and Linux user (macOS 10.10 or above or Linux distributions with kernel 2.6.27 or higher), please use ToupLite.

When connecting the camera with a mobile device, the free ToupView App is required. Just make sure that the mobile device uses iOS 11 or higher/Android 5.1 or higher operating systems.

The software or the App can be downloaded from the following link：

Windows: https://www.touptekphotonics.com/download/

Linux & macOS: https://www.touptekphotonics.com/download/

iOS: https://itunes.apple.com/us/app/toupview/id911644970

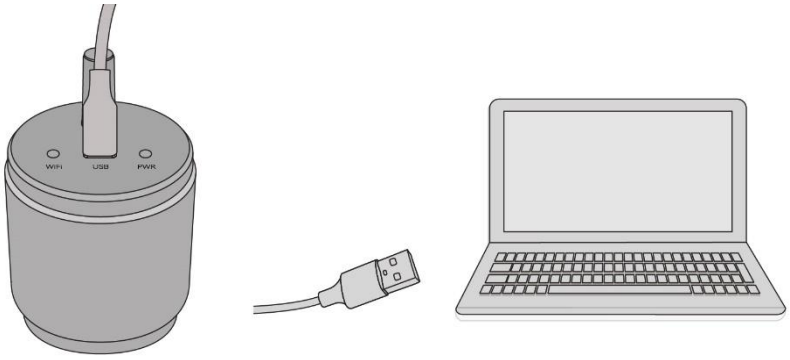
Android: https://play.google.com/store/apps/details?id=com.touptek.tpview

Note:The device must be WiFi enabled to support WiFi connection.

5 Two connection methods for WUCAM1080PA series cameras

There are two main ways to use WUCAM1080PA series.

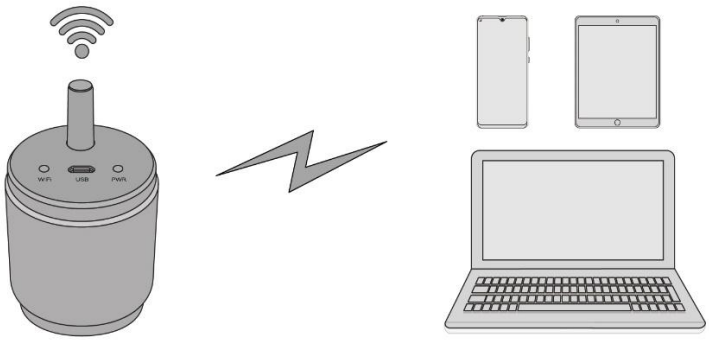
5.1 Connecting camera to the PC with Micro USB port



The steps to start the camera are listed below:

- Install the ToupView /ToupLite software on your PC;
- Connect the Micro USB cable to the power port, Wait for the camera to start;
- Open ToupView/ToupLite software. The WUCAM1080PA series camera will be recognized automatically by
- software. In ToupView/ToupLite software, select the corresponding WUCAM1080PA series camera by clicking the
- camera name in the camera list.

5.2 Camera working in WiFi AP mode



The steps to start the camera are listed below:

- Install the ToupView/ToupLite on your PC or install the ToupView App on the mobile device;
- Connect the Micro USB cable to 5V power adapter;

- Connect the PC or mobile device to the WiFi ssid of camera;
- Start the ToupView/ToupLite software or ToupView App and check the configuration. Normally, active WUCAM1080PA cameras are automatically recognized. The connected cameras will be listed in the Camera List group of the Camera Control Bar of ToupView/ToupLite on PC. On mobile device, connected cameras will be listed in the Camera Thumbnail page of ToupView App. Click the corresponding camera to start the stream.

6 Contacting Customer Service

Please contact your local distributor if you have any questions about the product.