

Embedded USB Microscope Camera

**HC4K**

# **User's Manual**



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# Chapter 1 Notes and Safety Requirements

## 1.1 Cautions and Notes

- To avoid danger or damage incurred to the lens, do not touch the lens or sensor directly with your fingers.
- To avoid failure or electric shock hazard and so on, do not disassemble or modify the internal structure of the device.
- Do not plug in or unplug the Power connection port when hands are wet.
- Do not use alcohol and other organic solvents to clean.
- If the lens or sensor is dirty or damp, you should better use dry and non-linen fabric or professional lens tissue to wipe them. To avoid scratches on the surface, do not touch the lens with your fingers. Wipe the lens or sensor lightly.
- The products are not specifically designed for an outdoor use. Do not expose it to outdoor environment without any protection. Excessive temperature and humidity will damage the lens. Please avoid using the product under the following environment: high temperature or high humidity environment, places with direct sunlight, dirt or vibration and places near heat source.
- Please use and store in the following environment:
  - Operating temperature : 0°C~ 40°C
  - Storage temperature: -20°C~ 60°C
  - Operating Humidity: 30~60%RH
  - Storage Humidity: 10~80%RH
- If any foreign matter, water or liquid enter into the device by accident, disconnect the Power line immediately. Please send it to the maintenance center and do not use the hair dryer to dry it by yourself.
- To prevent microscope from being tripped over or dropped, please put away the device's connect cable in use or standby.
- To avoid electric shock by accident, please power off microscope before you move your computer or laptop.
- The cleanliness of the device lens will directly affect clarity degree of contents from the computer screen during preview. Problems like various circles or spots on the screen may mostly be incurred by dirt on the lens. When cleaning, please use professional lens tissue or other professional detergent to clear the dirt on the lens.
- Registered trademark and copyright: Copyright ownership of this produc belongs to Lanoptik Technologies Ltd. Without written authorization of this company, any organizations or individuals shall not photocopy, print, or translation to another language to any part of this document.

## **Chapter 2    Software System Requirements**

### **2.1 System Requirements under USB Work Mode**

- Windows 7 (64bit), Windows 8 (64bit), Windows 8.1 (64bit), Windows 10 (64bit) , Windows 11 (64bit)
- Dual core 3GHz or higher CPU
- USB 2.0 high-speed interface or USB2.0 compatible interface
- At least 10 GB available hard-disk space
- 8G or more memory
- DVD-ROM driver (only needed when installing software)

## Chapter 3 Packing List

- Camera



- Installation Disk

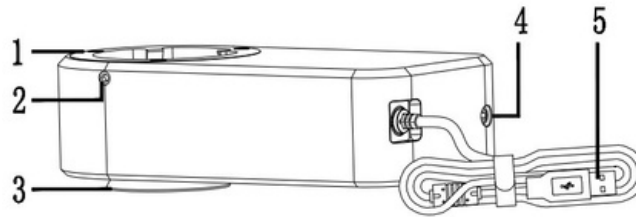


- Hexagon key



## Chapter 4 Function Introduction of Each Part

### 4.1 Name and Function for Each Part of the Camera



1. Female interface: connected with the eyepiece end of biological microscope.
2. Fastening screws: tighten the screws with the hexagon key to fix the eyepiece end of the biological microscope.
3. Male interface: it is connected with the objective lens end of biological microscope.
4. Focusing screw: turn the screw with the hexagonal key to adjust the focal length.
5. USB cable: connect with computer to realize data transmission.

## Chapter 5 Product Assembly Guide

### 5.1 Camera Assembly

#### 5.1.1 Assembly with microscope

##### 1. Separate eyepiece part from objective part as shown in figure 1

1. Loosen the fixing screw of the microscope.
2. Remove the eyepiece part of the microscope.

##### 2. Assembly the Digital Camera as shown in figure 2

1. Place the Digital Camera on the top of the microscope objective.
2. Tighten the fastening screw.

##### 3. Assemble eyepiece part of the microscope as shown in figure 3

1. Place the eyepiece part of the microscope to the female interface of the Digital Camera.
2. Tighten the fastening screw.

##### 4. Connect the HC4K camera to the USB port of computer, run the software and start using it. Please refer to User Manual of Pixit Pro for software operations.

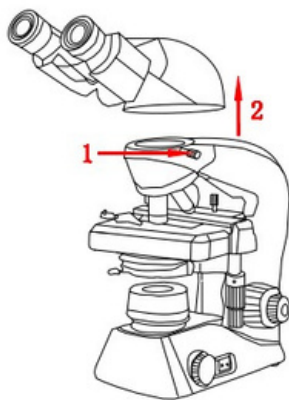


Figure1

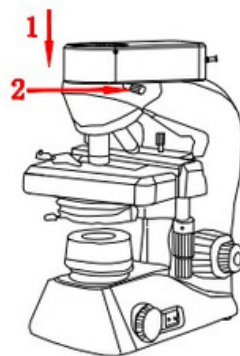


Figure2

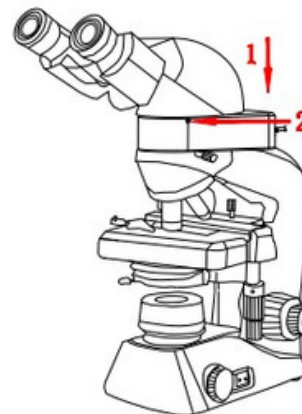


Figure3

#### 5.1.2 Disassembly the Camera

Reverse the assembly sequence.

## Chapter 6 Instructions

### 6.1 Install Pixit Pro Software

Through the download links provided with the packing box, please download Pixit Pro software. For the specific operation of software, please refer to the "User Manual of Pixit Pro\_English"

### 6.2 Device Connection

- (1) Connect the USB-A port of the USB cable to the USB port of the computer.
- (2) Turn the Digital Camera work mode switch to USB work mode. It may appear the reminder for installing device's driver when you first use the Digital Camera and then system will finish installation automatically.

### 6.3 Open Software

- (1) Place the Camera soundly and align the lens to the observation object.
- (2) Execute the Pixit Pro software in your computer to observe your needed image.

### 6.4 Start to Use

- (1) Connect the microscope to Digital Camera when required.
- (2) Turn on the Camera and connect to the device.
- (3) Adjust the microscope or Camera button to view required objects.
- (4) For more detailed instructions, please refer to User Manual of Pixit Pro software.



## Chapter 7 Disclaimer

1. In order to protect the legitimate rights and interests of users, please carefully read the instructions, disclaimers and safety instructions provided with this product before using it. The company reserves the right to update the above documents. Please operate the product according to the instructions and safety instructions.

2. Once you begin to use the product, you shall be deemed to have read, understood, recognized and accepted all terms and contents of the product's instructions, disclaimers and safety instructions. Users undertake to be responsible for their actions and all consequences. User undertakes to use the product only for legitimate purposes and agrees to these terms and any relevant policies or guidelines that the company may establish.

3. In the process of using this product, please strictly abide by and execute the requirements including but not limited to the instructions and safety instructions. All personal injuries, accidents, property losses, legal disputes and other adverse events that cause conflicts of interest caused by violation of the safety instructions or irresistible factors shall be borne by users themselves, and the company shall not assume any responsibility.

4. Safety instructions:

- Please do not use wet hands to plug and unplug the power supply of the equipment.
- Please be sure to use a regular brand power socket, and make sure the grounding is well grounded to prevent electric shock.
- Please be sure to make regular safety checks on sockets and plugs to avoid potential electrical safety hazards caused by aging and short circuit.
- Please be sure not to use the product in a humid or hot environment to ensure the safety of the product.
- Please be sure to loosen bundle cords of the power cable before using, to avoid electromagnetic induction and heating, thus increasing the heat dissipation speed.
- Please be sure not to use the product equipment or socket or other places in high or easy to fall, so as to avoid damage.
- Before opening the socket power supply, please be sure to turn off the load power switch of the product equipment.
- The company reserves the rights to improve product, upgrade technology and change parameters without prior notice.

Specifications are subject to change without any obligation on the part of the manufacturer.

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