

USB Microscope Camera

# **User 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 USB 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 : -10°C~ 50°C
- Storage temperature: -20°C~ 60°C
- Operating Humidity : 30~80%RH
- Storage Humidity: 10~60%RH
- If any foreign matter, water or liquid enter into the device by accident, disconnect the USB cable 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 USB cables 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.

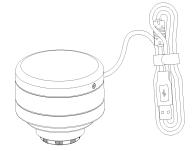
# Chapter 2 Software System Requirements

### 2.1 System Requirements under USB Work Mode

- a) Windows XP SP3, Windows 7 (32 or 64 bits), Windows 8 (32 or 64 bits), Windows 8.1 (32 or 64 bits), Windows 10 (32 or 64 bits).
- b) Dual core 3 GHz or higher CPU
- c) USB 2.0 high-speed interface or USB2.0 compatible interface
- d) DVD-ROM driver (only needed when installing software)
- e) 4G or more memory
- f) At least 10 GB available hard-disk space

# Chapter 3 Package list

#### 1. Digital Camera



2. Installation disk



3. Eyepiece (optional accessory)



4. Adapter (optional accessory)



# Chapter 4 Function Introduction

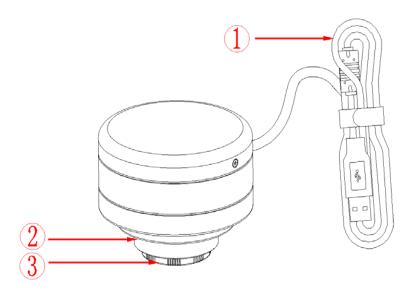
# 4.1 Name and function for body units of Digital Camera

### 4.1.1 Body Introduction

#### Digital Camera:

Standard C Port Digital Camera suitable for adapter ring of 23.3mm, 30mm and30.5mm, achieving connections with microscopes of different interfaces; the COMS chips significantly reduce the image noise, bearing characteristics of quick transmission speed, excellent color rendition, clear image and storage convenience, etc., which can be widely used in industrial tubes, teaching, material analysis, clinical examination, machine vision, etc.

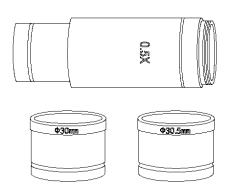
#### 4.1.2 Function for body units of Digital Camera



USB Cable:Used for connecting camera to PC.

C-mount thread: make our camera can install to a standard C-mount microscope or spotting scope; or can install to a different interface microscope with adapter (optional accessory). (For detailed specifications, please refer to Chapter 5) Dust-proof Cover: screw it out before use for dust prevention and chip protection.

# 4.2 Optional accessory Introduction

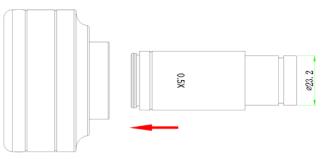


#### Adapter Ring and Eyepiece (Optional

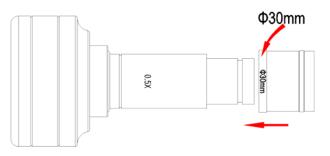
**Components):** Digital Camera can be equipped into microscopes of different calibers through adapter ring and eyepiece. The Digital Camera body is of Standard C Port; 0.5X eyepiece is of 23.2mm; adapter ring is of 23.2/30mm, 23.2/30.5mm. According to different assembly methods, the equipment can be connected to eyepieces of different ports.

#### 4.2.1 Connection methods and types

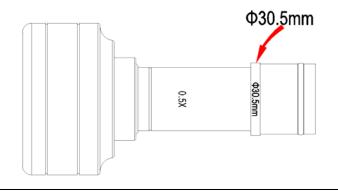
- 1. Install to a standard C-mount interface microscope
- 2. Install to a 23.2mm interface microscope



3. Install to a 30mm interface microscope



4. Install to a 30.5mm interface microscope



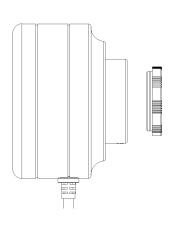
# Chapter 5 Product Assembly Guide

### 5.1 Digital Camera assembly and disassembly

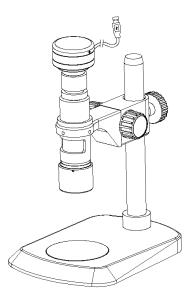
### 5.1.1 Digital Camera Assemble with Microscopes

#### 1.Connection of Microscope for Standard C Port

Unscrew the plastic dust-proof cover at the bottom of the Digital Camera, take the protective film on the filter of the cavity (See Picture 1). Screw the Digital Camera to other microscopes (Standard C Port) (See Picture 2). Connect the eyepiece to the computer and start the program.



Picture 1



Picture 2

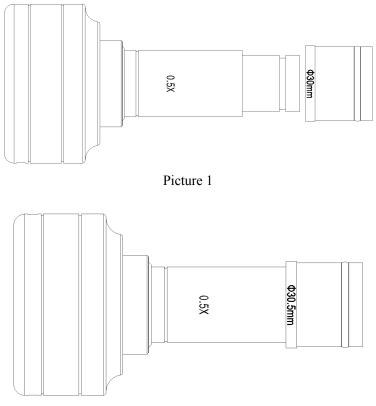
#### 2.Connection with Stereo microscope

Unscrew the dustproof cover of the Digital Camera, take the protective film on the filter of the cavity.

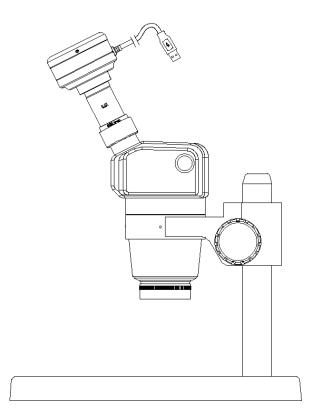
Connect the eyepiece to additional eyepiece (See Picture 1 and 2).

Narrow the eyepiece cover (or empty sleeve) into 23.2/30mm adapter ring (or 23.2/30.5mm adapter ring).

Set the adapter ring with Digital Camera to stereo microscope (See Picture 3).







Picture 3

### 5.1.2 Digital Camera Disassembly

#### 1. Disassembly with Standard C Port Digital Camera

- 1) Turn off the software and unplug the USD cable.
- 2) Screw out the Digital Camera from the microscope.
- 3) Screw the plastic dustproof cover on.
- 4) Put the Digital Camera in place in case of falling down.

#### 2. Disassembly with Stereo microscope

- 1) Take the product and adapter ring out from the stereo microscope.
- 2) Disassemble the adapter ring and eyepiece from the product.
- 3) Screw the plastic dust-proof cover on.
- 4) Put the Digital Camera in place in case of falling down.

# Chapter 6 Instructions

### 6. 1 Install Micro Capture Software

Put the appendant disc into the DVD driver of your computer, click Micro Capture Install file and finish the installation of the application software according to the software reminder. For detailed install methods, please refer to User Manual of Micro Capture English.

# 6. 2 To Connect Device

- (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 Digital Camera soundly and align the lens to the observation object.
- (2) Execute the Micro Capture 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 Digital Camera and connect to the device.
- (3) Adjust the microscope or Digital Camera button to view required objects.
- (4) For more detailed instructions, please refer to User Manual of Micro Capture English.