

MC500W-G1/MC4KW-G1

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 : -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 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)

2.2 System Requirements under WiFi Work Mode

- 5.0 or above version for Android system.
- 8.0 or above version for IOS system.
- Wireless network hardware must support the 802.11ac protocol (5G WiFi mode).

Chapter 3 Packing List

Camera



• Installation Disk



• USB Power Adapter





• USB Cable



• Eyepiece (optional accessory)



• Eyepiece Adapter (optional accessory)





Chapter 4 Function Introduction

4.1 NAME AND FUNCTION FOR BODY UNITS OF CAMERA

4.1.1 Body Introduction

WiFi Digital Camera:

Standard C Port WiFi 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 Camera



1 WiFi signal switch/reset button hole

Short press: press 1-3 seconds to switch WiFi signals (2.4G to 5G) Long press: more than 10 seconds, restore the default Settings.

② Charge lamp (Only available for MC500W-G2 and MC4KW-G2)

While charging from a USB port in a computer or adapter, it can be used at the same time. If battery has low energy or no energy, the light flashes once 1.5 seconds. If battery has medium energy, the light flashes once 2.5 seconds. If battery has high energy, the light flashes once 4 seconds. If battery fully charged, the light will be always green.

3 Power lamp

High power: green light Low power: red light No power: the device turns to power off state after 30 times of red light flashing. You need to reset the button for new work. When red light flashes, work can be done under charging mode.

④ WiFi lamp

The WiFi indicator is on when in wireless working mode, When the output signal is 2.4G WiFi, the WiFi indicator is blue. When the output signal is 5G WiFi, the WiFi indicator is green. Note: the default WiFi output signal is 5G WiFi. The switch of 2.4G and 5G signals can be achieved by pressing the WiFi signal switching port (1-3 seconds).

5 Toggle key:

Divided into Three states:

- Toggle left(switch Icon): shut down.
- Toggle middle (USB Icon): PC enable.
- Toggle right (WiFi Icon): wireless WiFi enable.

6 USB Type-C port

Charge the WiFi Digital Camera is connecting adaptor with USB Cable; Connect PC with USB Cable, and turn on the USB Cable work mode, Camera will start wired working.

7 Antenna

External antenna for WiFi signal.

(8) Quick mounting screw hole

It has ¼ inch threaded port at the bottom, and it can be directly locked on the tripod.

(9) C-mount thread

Make the camera can be installed to a standard C-mount microscope or spotting scope; or a different interface microscope with adapter (optional accessory). (For detailed specifications, please refer to Chapter 5)

10 Dustproof Cover

Screw it out before use for dust prevention and chip protection.

4.2 Optional accessory Introduction

Adapter Ring and Eyepiece (Optional Components):

The camera can be equipped into microscopes of different calibers through adapter ring and eyepiece. The Camera eyepiece 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







Product Assembly Guide Chapter 5

5.1 Camera Assembly and Disassembly

5.1.1 Assembly with Microscopes

Connection of Microscope for Standard C Port

- Unscrew the plastic dustproof cover at the bottom of the Camera, take the protective film on the filter of the cavity (See Picture 5-1).
- Screw the Camera to other microscopes (Standard C Port) (See Picture 5-2).
- Connect the eyepiece to the computer and start the program.



Connection with Stereo Microscope

- Unscrew the dustproof cover of the WiFi Digital Camera, take the protective film on the filter of the cavity.
- Connect the eyepiece to additional eyepiece (See Picture 5-3 and 5-4).
- 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 WiFi Digital Camera to stereo microscope (See Picture 5-5).





Picture 5-5

5.1.2 Camera Disassembly

Disassembly with Standard C Port WiFi Digital Camera

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

Disassembly with Stereo microscope

- (1) Take the product and adapter ring out from the stereomicroscope.
- (2) Disassemble the adapter ring and eyepiece from the product.
- (3) Screw the plastic dustproof cover on.
- (4) Put the WiFi Digital Camera in place in case of falling down.

Chapter 6 Instructions

6.1 USB Wired Work Mode

6.1.1 Install Pixit Pro Software for Windows OS

Put the appendant disc into the DVD driver of your computer, click Pixit Pro 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 Pixit Pro.

6.1.2 To Connect Device

(1) Connect the USB-A port of the USB cable to the USB port of the computer.

(2) Turn the camera and switch to USB work mode. It may appear the reminder for installing device's driver when you first use the camera and then system will finish installation automatically.

6.1.3 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.

6.1.4 Start to Use

(1) Connect the microscope to 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.

6.2 WiFi Work Mode - iOS System

6.2.1 Install KoPa WiFi Lab for iOS Device

Download and install KoPa WiFi Lab software in APP Store of Apple.

6.2.2 To Connect Device

 (1) Turn the work mode switch of the WiFi Digital Camera to WiFi work mode. After about 20 seconds, the WiFi indicator in the WiFi camera stops flashing and stays on.
 (2) Setting under iPad or iPhone system-connect camera under WiFi, WiFi name: WiFiCamera_xxxxxx (2.4G mode)
 WiFiCamera_5G_xxxxxx (5G mode)
 Password: 12345678

6.2.3 Open Software

- (1) Place the WiFi Digital Camera soundly and align the lens to the observation object.
- (2) Execute the KoPa WiFi Lab software under the desktop of system to observe your needed image.

6.2.4 Start to Use

For more detailed instructions, please refer to User Manual of KoPa WiFi Lab for iOS.

6.3 WiFi Work Mode - Android System

6.3.1 Install KoPa WiFi Lab for Android Software

You can use one of the following two methods when installing software.

(1) Download and install KoPa WiFi Lab software on Google play.

(2) Copy the KoPa WiFi Lab for Android software to Android system for installation.

6.3.2 To Connect Device

(1) Turn the work mode switch of the WiFi Digital Camera to WiFi work mode. After about 20 seconds, the WiFi indicator in the WiFi camera stops flashing and stays on.
(2) Setting under iPad or iPhone system-connect camera under WiFi, WiFi name:
WiFiCamera_xxxxxx (2.4G mode)
WiFiCamera_5G_xxxxxx (5G mode)

Password: 12345678

6.3.3 Open Software

(1) Place the WiFi Digital Camera soundly and align the lens to the observation object.

(2) Execute the KoPa WiFi Lab software under the desktop of system to observe your needed image.

6.3.4 Start to Use

For more detailed instructions, please refer to User Manual of KoPa WiFi Lab for Android.

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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