Manual





Camera Set Up & Installation



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Notes and Safety Requirements

Cautions and Notes

- 1) To avoid danger or damage incurred to the lens, do not touch the lens or sensor directly with your fingers.
- 2) To avoid failure or electric shock hazard and so on, do not disassemble or modify the internal structure of the device.
- 3) Do not plug in or unplug the USB port when hands are wet.
- 4) Do not use alcohol and other organic solvents to clean.
- 5) If the lens or sensor is dirty or damp, it is better to 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.
- 6) The products are not designed for 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.
- 7) Please use and store in the following environment:

Operating temperature : 0°C~ 60°C Storage temperature: -10°C~ 60°C Operating Humidity : 30~60%RH Storage Humidity: 10~80%RH

- 8) If any foreign matter, water or liquid enters the device, disconnect the USB cable immediately. Please send it to ACCU-SCOPE for maintenance. DO NOT use a hair dryer to dry it by yourself.
- 9) To prevent microscope from being tripped over or dropped, please put away the device's USB cables in use or standby.
- 10) To avoid electric shock by accident, please power off microscope before you move your computer or laptop.
- 11) 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.

Software System Requirements

System Requirements under USB Work Mode

Macintosh OS not supported.

- Windows 10 (64-bit) or higher
- i5 (10th gen.) processor or later
- 512GB hard disk space or more
- 16GB RAM
- Graphics card: Core graphics
- USB 2.0 high-speed port
- Internet connection for software download
- Wireless network card, IEEE802.11ac compatible
- LAN network card for Ethernet operation, 10/100/1000Mb auto adaptive

System Requirements under WiFi Work Mode (mobile device)

Android

- Android v7.0 or higher
- Dual-Core processor, 1.7GHz or later
- 32GB storage space or more
- 3GB RAM
- Supports 5GHz WiFi wireless protocol IEEE802.11ac

Windows PC

- Windows 10 (64-bit) or higher
- i5 (10^h gen.) processor or later
- 512GB hard disk space or more
- 16GB RAM
- Graphics card: Core graphics
- USB 2.0 high-speed port
- Internet connection for software download
- Wireless network card: IEEE802.11ac

iOS (Apple)

- iOS 11.0 or later
- Dual-Core processor, 1.8GHz or later
- 32GB storage space or more
- 2GB RAM
- Supports 5GHz WiFi wireless protocol IEEE802.11ac

Package Contents

1. SKYE WiFi 3 Camera



2. USB power adapter



3. Gigabit Ethernet cable (2m)



5. Package insert sheet with quick connection guide

4. HDMI cable (2m)



6. USB stick with software and instruction manual

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Function Introduction

Hardware Introduction



1 Antenna

2 Power indicator LED

(3) Mode switch (WiFi / Off / USB)

(4) ACT indicator LED

(5) C-mount
(6) HDMI port
(7) Ethernet port
(8) USB / power cord (attached)

1 Antenna (5G)

2 Power indicator LED:

- Red: Power is off
- Green: Power is on and camera is in WiFi or USB mode.

3 Mode Switch:

Divided into Three modes:

- Toggle left (USB icon): Enables PC connection and power supply via USB
- Toggle middle (switch icon): Off
- Toggle right (WiFi icon): wireless mode or Ethernet mode; power via USB to AC outlet

(4) Activity (ACT) indicator LED:

- Blue: Camera in WiFi mode. Camera is ready for connection by smart device via WiFi.
- Off: Camera is operating in another mode (USB)

(5) C-mount:

Camera can be installed onto the microscope camera port using a standard C-mount adapter for the given microscope. Refer to Product Assemble below, or your microscope's instruction manual.

6 HDMI Port:

Connect HDMI cable to camera and HDMI-ready monitor/TV to view images from the camera. Camera must be controlled by mobile device or PC via WiFi connection or by PC via USB or Ethernet connection.

7 Ethernet Port:

Connect Ethernet cable (RJ46) to Local Area Network or router using Ethernet cable (not included). Connect PC to LAN via Ethernet cable or to router via Ethernet cable or WiFi. Switch Mode Switch to WiFi mode – camera will automatically switch to Ethernet mode. Use software on PC to control camera and view images.

(8) USB/Power Cable (USB Type A connector; hard-wired to the camera):

Cable is "cut-off" in illustration.

Two operations:

- Power only: Connect end to USB power adapter to draw power from AC receptacle. Camera control and data transfer occurs via WiFi or Ethernet connection to the camera.
- Power and Data Transfer: Connect USB end to Windows PC USB port. Camera draws power from PC through the USB cable, and camera control and data transfer shares the same USB cable.

Optional accessory Introduction



C-mount Adapter for Microscope Photo Port: The SKYE WiFi 3 camera can be adapted to most photo ports of most manufacturer's microscopes. Contact your microscope dealer for the appropriate C-mount adapter to fit your particular model of microscope.

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Connection methods and types

- 1. Remove dust plug from the C-mount on the bottom of the camera.
- 2. Thread C-mount adapter into C-mount of camera. For the SKYE WiFi 3, the optimal C-mount adapter magnification is 0.5x. NOTE: Hold the camera and adapter sideways to minimize any dust from entering the camera. Dust degrades the image quality.



3. Set the bottom of the C-mount adapter (with camera attached) into the camera port of the microscope and secure in place with the locking screw.



Some microscopes may require other adapters to attach the camera to the microscope. Please consult your microscope manual, microscope sales representative or the microscope manufacturer for the required adapter(s).



Connection Methods

Camera Work Modes

The SKYE WiFi 3 camera can operate in five (5) work modes: USB, WiFi (PC, Apple iOS, Android) and Ethernet. Ethernet work mode can be used as either direct connect (Ethernet to Ethernet though a LAN or router) or WiFi (Ethernet to router, WiFi connection to router). Refer to the instructions below to connect to the camera with the desired operation mode.

USB Wired Work Mode

Install SKYE View Software

Insert the included USB stick into a USB port on your computer, click SKYE View Install file and finish the installation of the application software according to the on-screen prompts. For detailed installation methods, please refer to User Manual for SKYE View.

Connect to the Camera

- 1) Connect the USB/power cable of the SKYE WiFi Camera to the USB port of the computer.
- 2) The device's driver may automatically install when you first use the SKYE WiFi Camera, and then system will finish installation automatically.

Open Software

- 1) Attach the SKYE WiFi Camera to the microscope and, using the eyepieces, focus on the desired object.
- 2) Execute the SKYE View software on your computer to observe your needed image. You may need to switch the light path to send light to the camera.
- 3) For detailed instructions on the use of SKYE View software, please refer to User Manual for the SKYE View software (available on the USB stick that came with the SKYE WiFi camera, and on the ACCU-SCOPE > Support > Software webpage.

WiFi Work Mode – Windows PC

Install SKYE View software

1) Download and install SKYE View software from the included USB stick, or from our software downloads page (https://accu-scope.com/support/software-updates).

NOTE: Be sure to download the SKYE View app version that corresponds to the version of your SKYE WiFi camera, specifically use SKYE View 3 with SKYE WiFi 3 cameras and SKYE View 2 with SKYE WiFi 2 cameras. Due to hardware differences between camera versions, these apps/software are not interchangeable and are not backwards compatible.

Connect to the Camera

- 2) Turn the work mode switch of the SKYE WiFi Camera to WiFi work mode. After ~20 seconds, the ACT indicator of SKYE WiFi Camera blinks blue.
- 3) On the PC, navigate to WiFi network setting and connect to the SKYE WiFi Camera: WiFiCamera-xxxxxx, default password: 12345678

Open Software

- 4) Attach the SKYE WiFi Camera to the microscope and, using the eyepieces, focus on the desired object.
- 5) Execute the SKYE View mobile app on your iOS device to observe your needed image. You may need to switch the light path to send light to the camera.

Start to Use

5) Click on the microscope icon 🖉 to enter live preview mode.

For detailed operating instructions, please refer to User Manual for SKYE View Mobile App.

WiFi Work Mode - iOS System (Apple)

Install SKYE View app for iOS (iPhone, iPad)

1) Download and install SKYE View app in Apple APP Store.



NOTE: Be sure to download the SKYE View app version that corresponds to the version of your SKYE WiFi camera, specifically use SKYE View 3 with SKYE WiFi 3 cameras and SKYE View 2 with SKYE WiFi 2 cameras.

Connect to Device

- 2) Turn the work mode switch of the SKYE WiFi Camera to WiFi work mode. After ~20 seconds, WiFi work indicator of SKYE WiFi Camera blinks.
- 3) Launch the SKYE View app.

- 4) Click the Scan Camera QR Code icon 🗒 .
- 5) Point the phone camera at the camera QR code on the side of the camera. The app will automatically connect to the camera without the need to use the WiFi network settings or to enter a password.



Alternative connection method

- 6) Navigate to WiFi network settings on your iOS device.
- Choose SKYE WiFi Camera under WiFi, WiFi name: WiFiCamera-xxxxxx, default password: 12345678

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[insert our own screenshots]

8) Launch the SKYE View app

Start to Use

9) Click the Play icon D on the main app interface to enter live preview mode.

For detailed operating instructions, please refer to User Manual for SKYE View Mobile App.

WiFi Work Mode - Android System

Install SKYE View app for Android

1) Download and install SKYE View app from Google Play.



NOTE: Be sure to download the SKYE View app version that corresponds to the version of your SKYE WiFi camera, specifically use SKYE View 3 with SKYE WiFi 3 cameras and SKYE View 2 with SKYE WiFi 2 cameras.

Connect to Camera

- Turn the work mode switch of the SKYE WiFi Camera to WiFi work mode. After ~20 seconds, WiFi work indicator of SKYE WiFi Camera blinks.
- 3) Launch the SKYE View app.
- 4) Click the Scan Camera QR Code icon 🗒 .



5) Point the phone camera at the camera QR code on the side of the camera. The app will automatically connect to the camera without the need to use the WiFi network settings or enter a password.

Alternative connection method

- 6) Navigate to WiFi network settings on your Android device.
- Choose SKYE WiFi Camera under WiFi, WiFi name: WiFiCamera-xxxxx, default password: 12345678
- 8) Launch the SKYE View app

Start to Use

9) Click the Play icon D on the main app interface to enter live preview mode.

For detailed operating instructions, please refer to User Manual for SKYE View Mobile App.

Ethernet (Local Area Network – LAN) Connection

Ethernet connection allows the camera to be accessed across a LAN by up to 13 mobile or PC devices that are also connected to the same LAN router.

NOTE: The LAN must support 5G WiFi IEEE802.11ac protocol, otherwise the camera will not be displayed in the list of available cameras in the apps or software.

NOTE: Operation requires camera control by smart phone or PC (the camera does not have built-in software for stand-alone operation).

Connect to LAN

1) Connect Ethernet cable (provided) to Ethernet (WAN) port on camera, and connect the other end of the Ethernet cable to a suitable network (LAN) port on a router. LAN/router must support IEEE802.11ac protocol.

Install SKYE View app

2) Download and install SKYE View app as described previously.

Connect to Camera

 Turn the work mode switch of the SKYE WiFi Camera to WiFi work mode. After ~20 seconds, WiFi work indicator of SKYE WiFi Camera blinks. Camera will automatically switch to Ethernet transmission.

Viewing Images via LAN

Images from any camera on the LAN can be viewed by any PC or mobile device that is on the same LAN as the camera. Multiple cameras can be simultaneously connected to the same LAN. SKYE View 3 supports switching between cameras on the same LAN at any time.

4) Connect a Windows PC, laptop or mobile device that supports 5G WiFi IEEE802.11ac protocol to the same local area network as the camera.

- 5) Run SKYE View 3 on the Windows PC, laptop or mobile device.
- 6) If there is only one network camera on the LAN, the software can automatically view the live image from the camera.
- 7) When there are multiple network cameras in the same local area network,
 - a. On Windows PC, click the camera selection icon in the upper right corner of SKYE View 3 (Figure 1). The list automatically shows all cameras in the current local area network (Figure 2). Select a camera by clicking on it, then click Connect. SKYE View 3 supports switching between cameras on the same LAN at any time.



b. On mobile devices, click the camera select icon in the navigation interface (Figure 1), then choose Select camera. A pop-up menu appears with a list of available cameras (Figure 2). The list automatically shows all cameras in the current local area network (Figure 3). Select a camera by clicking on it. SKYE View 3 supports switching between cameras on the same LAN at any time.

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Figure 1



Figure 2





Start to Use

- 8) In the Windows software, click on the microscope icon de to enter live preview mode.
- 9) On the mobile app, click the Play icon \square on the main app interface to enter live preview mode.

For detailed operating instructions, please refer to User Manuals for SKYE View App and software.

HDMI Connection

HDMI connection can be used with any of the above work modes. It provides the option to display live images via projector or large monitor. HDMI connection requires camera control by smart phone or PC (the camera does not have built-in software for stand-alone operation).

Connect HDMI cable

1) Connect the HDMI cable (provided) from the HDMI port of the camera to the HDMI port of a compatible monitor or projector.

Install SKYE View app

2) Download and install SKYE View app as described previously.

Connect to Camera

3) Follow the previously described instructions to connect your device and SKYE View 3 app/software to the camera.

Start to Use

4) Follow the previously described instruction to enter live preview mode and begin imaging. The images will appear both on the PC or mobile device being used to control the camera AND the HDMI-connected monitor or projector.

For detailed operating instructions, please refer to User Manual for SKYE View Mobile App.

Troubleshooting

USB mode: Image Acquisition Problems

Images are not acquired

- 1) Confirm that the microscope is turned on, and the light and image are visible in the eyepiece;
- 2) Confirm that the USB port of the computer is working properly;
- Confirm the computer recognizes the camera. Go to the Device Manager and look for "USB Camera" or similar under Cameras. If the camera is not listed, unplug the camera USB cable from the computer and then plug it back in. If the camera still is not recognized, please contact our customer service group;
- 4) If the computer recognizes the camera but does not give an image, please reinstall the SKYE View 3 software. The software can be found on the USB stick that came with your camera, or it can be downloaded from our website at <u>https://accu-scope.com/support/software-updates</u>. Be sure to download the version of software that matches the version of your camera (i.e., SKYE View 3 for SKYE WiFi 3 cameras). Be sure to turn off anti-virus software during the installation process as it may intercept some essential files.
- 5) If the issue is not eliminated after restarting the camera, please contact our customer service group.

WiFi mode: Image Acquisition Problems

Cannot connect to WiFi

- Confirm that the mobile device recognizes the camera's WiFi as an available WiFi network. Try changing mobile devices. If the camera's WiFi cannot be seen even after changing devices, please contact our customer service group;
- 2) Confirm the SKYE View 3 app on your mobile device can scan the QR code on the camera body and connect to the camera's WiFi. If the app prompts "WiFi cannot be connected", you may need to allow the SKYE View 3 app to access and modify the system settings on your phone.

Image acquisition failure or large delay in image refresh rate

- 1) Confirm that USB mode generates an image from the camera;
- Confirm the SKYE View 3 app on your mobile device can scan the QR code on the camera body and connect to the camera's WiFi. If the app prompts "WiFi cannot be connected", you may need to allow the SKYE View 3 app to access and modify the system settings on your phone;
- 3) Confirm that data traffic is turned off on your phone, or turn off "Use data traffic to improve network" in your phone settings;
- 4) If the issue is not eliminated by these steps, please contact our customer service group.

No image display in WiFi output mode

- 1) Confirm that the microscope is turned on, and the light and image are visible in the eyepiece;
- 2) Confirm that the camera and the mobile device are using the same local area network;
- 3) If the issue is not eliminated, please contact our customer service group.

Interface problems

External HDMI monitor does not display / display exceptions

- 1) Confirm the HDMI cable can be used normally (is not bent, broken, etc.);
- Confirm the HDMI monitor can be used normally (HDMI port is in good and working condition, etc.);
- 3) Confirm that the external HDMI monitor can support these resolutions and frequencies: 3840x2160 @30Hz / 1920x1080 @60Hz / 1920x1080 @30Hz / 1280x720 @60Hz;
- 4) If the issue cannot be eliminated, please contact our customer service group.

For additional support, please contact Customer Support: support@accu-scope.com

Limited Warranty

Digital Cameras for Microscopy

This digital camera is warranted to be free from defects in material and workmanship for a period of one (1) year from the date of invoice to the original (end user) purchaser.

This warranty does not cover damage caused in-transit, damage caused by misuse, neglect, abuse or damage resulting from either improper servicing or modification by other than ACCU-SCOPE or UNITRON approved service personnel. This warranty does not cover any routine maintenance work or any other work that is reasonably expected to be performed by the purchaser. No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage or other conditions beyond the control of ACCU-SCOPE Inc. This warranty expressly excludes any liability by ACCU-SCOPE INC. and UNITRON Ltd for consequential loss or damage on only grounds, such as (but not limited to) the non-availability to the End User of the product(s) under warranty or the need to repair work processes.

All items returned for warranty repair must be sent freight prepaid and insured to ACCU-SCOPE INC., or UNITRON Ltd., 73 Mall Drive, Commack, NY 11725 – USA. All warranty repairs will be returned freight prepaid to any destination within the Continental United States of America. Charges for repairs shipped back outside this region are the responsibility of the individual/company returning the merchandise for repair.