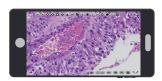


# User Manual of APP KoPa WiFi EDU





Note

KoPa WiFi EDU is dedicated to student smart devices (mobile phones, tablets).

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# 1.1 APP operating environment requirements

| System  | System version        | CPU                               | RAM         | ROM          | Protocol            |
|---------|-----------------------|-----------------------------------|-------------|--------------|---------------------|
| Android | 5.0 or later version  | Dual-core 1.7GHz or later version | 3GB or more | 32GB or more | 5G WiFi IEE802.11ac |
| iOS     | 11.0 or later version | Dual-core 1.8GHz or later version | 2GB or more | 32GB or more | 36 WIFTILEOUZ.TTAC  |

# 1.2 APP download and installation

Method 1: Scan the camera's APP QR code with the smart device's browser, and download and install [KoPa WiFi EDU] according to your cell phone system.

Method 2: Enter the following download link directly on the browser of your smart device: https://cn.ostec.com.cn/downloads/interactive-system-app.

Download and install [KoPa WiFi EDU] according to your cell phone system.

Method 3: Android users outside of mainland China can search and download [KoPa WiFi EDU] from Google Play, the Google App store.

iOS users can search and download [KoPa WiFi EDU] from the Apple App Store.

Note! APP installation process will prompt to allow permissions, please click all allow, otherwise the APP will not be able to use normally.

If the APP prompts you to authorize "Allow Auto Power Off", please follow the steps to allow it.

# 1.3 Capture images by using the APP

Step 1:Please make sure that the tutor's software is running properly and that the student end image is acquired properly by the tutor's software.

Step 2: Click the button " in the upper right corner of the tutor's software to enter the system settings module:

In the "Smart device access"

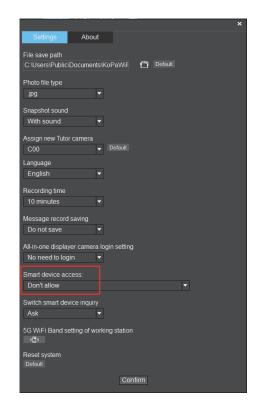
① When you select "Allow one mobile phone to connect one camera" and click "OK", then each student end will allow up to one mobile device to connect.

When the latter mobile device tries to connect to the same camera, by default, the former mobile device will receive a prompt of whether access is allowed or not, and the former mobile device will automatically withdraw from the connection after clicking Agree, the latter mobile device can only be connected successfully. If you want to change the setting to not require the consent of the former mobile device, the latter smart device can be connected by scanning the code, then the former smart device automatically exits, please go to the settings page of the tutor's software  $\rightarrow$ Switch smart device inquiry  $\rightarrow$  select "Don't ask".

- ② When you select "Allow multi-ple mobile phones to connect one camera" and click "OK", then each student end will allow up to 30 mobile device to connect, It is the maximum number of mobile devices that can be connected to a single classroom on a single network.
- ③ When you select "Don't allow" and click "OK", then each student end is not allowed to connect to mobile device.

Step 3: Automatic connection

Click the button " " on the [KoPa WiFi EDU] navigation interface and scan the QR code, automatic connection to the microscope screen without entering a password.

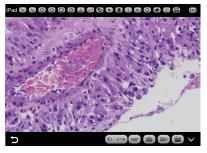


Step 3: Automatic connection

Click the button " on the [KoPa WiFi EDU] navigation interface and scan the QR code, automatic connection to the microscope screen without entering a password.







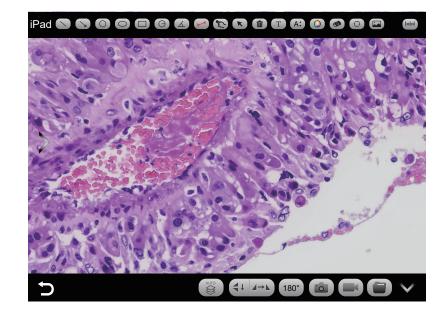
# 1.4 APP function introduction





| А | Preview           | Click and enter the image preview window.   |
|---|-------------------|---|
| В | File folder       | View photo / video files.   |
| С | Scanning          | Scan the QR code on the student end camera to acquire the image.  |
| D | Settings          | APP settings.   |
| Е | Action guidelines | Retrieve / hide user action guidelines.   |
| F | Login             | When you first enter the APP, log in your name / student number / class / college department / school / etc., name is required, other are optional fields. Once you click "OK", you will be able to view your students' login status in the "KoPa WiFi EDU" online attendance list of the tutor's software.  Click the user button"  " in the upper right corner to add / delete / switch login accounts. |

# 1.4.1 Preview window



#### (1) Annotation tools

|    | Straight line |   | Single arrow | Round  |   | Oval        |
|----|---------------|---|--------------|--------|---|-------------|
| En | Hand-draw     | K | Select       | Delete | T | Insert text |
| A: | Font size     |   | Colour       | Eraser | 0 | Rotate      |
|    | Add a picture |   |              |        |   |             |

#### (2) Measurement tools







Circular measurement



Protractor measurement

Name

Lenath

1000



Linear distance measurement



Calibration

Selected

Pixels

1073

Usage of calibration and measurement:

Use the APP for calibration and measurement (It is recommended to use the mouse to access the phone for calibration and measurement will be more accurate) .

Step 1: Place the calibration scale within the microscope's field of view;



Step 2: Click on the Calibration button " [HM]";

Step 3: Select the Add button " + ";



Unit



Step 4: Enter the name, the actual length of the calibration scale, and select the unit. When you draw on the ruler, the pixels are automatically entered as shown below. Click "OK" to complete the calibration;

Step 5: Click on the calibration value matching the objective and use the Select button " ";

Step 6: Use the measurement tool of the preview window to measure.



#### (3) Image processing tools

| AUTO | High content | <b>₹↓ △→k</b> | Flip / Mirror | 180° | 180°Rotation    |
|------|--------------|---------------|---------------|------|-----------------|
|      | Take picture |               | Record        |      | File management |

#### High content

Automatic depth-of-field fusion function for high content images works with USB or WiFi connection.

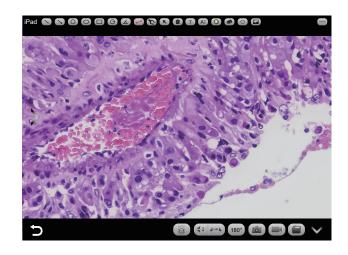
Break through the limitation of insufficient depth-of-field in high magnification objective lenses, and to adjust the focal length can obtain a greater depth of field, thus obtaining a sharper image than a real-time single-frame image, support taking one picture, two archives.



#### 1.4.2 Camera control tools

Click the arrow button on the left side of the preview window to bring up the camera control bar.

Note: In order to reduce students' image attribute adjustment errors, the tutor's software can also turn off the student end image attribute adjustment function by clicking the "Lock student camera parameters adjustment" button in the "Interactive Settings", and then you can open this function by clicking it again.



(1)Image ratio

Support switching 4:3 /16:9 image ratio.

| Image proportion | Parameters |
|------------------|------------|
| 4:3              | •          |
| 16:9             |            |

#### (2)Camera working mode

Users can select different exclusive types of stained pathology sections to obtain matching image effects and more accurate color reproduction.

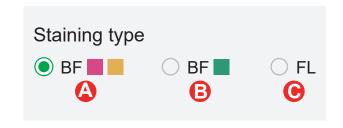
Type A: for bright-field, red or gold-based sections;

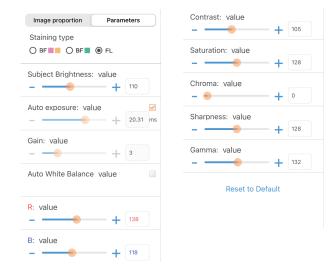
Type B: for bright-field, cyan-dominated sections;

Type C: for fluorescence observation.

Note: Type C will only be displayed if the camera's firmware type

supports type FL.





#### (3)Camera parameters adjustment

Support adjusting Subject Brightness, auto / manual Exposure, Gain, auto / manual White Balance (RB channel is adjusted separately), Contrast, Hue, Saturation, Sharpness, Gamma, Restore to Default.

# 1.4.3 Folder management

#### (1) Images management

Click on "Select" in the upper right corner to make single or multiple selections and then click the button at the bottom, from left to right, respectively:

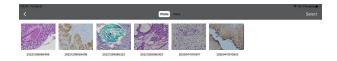
One-click export to local album

Note: Please select Allow APP to access your album by setting your smart device "Setting - Privacy - Photo", otherwise it will prompt "Export fail".

Share to social networks

One-click delete

Search image file by name



Click to enter any image, the button at the bottom from left to right:

Send to the mailbox (the smart device needs to be installed in advance with the mailbox);

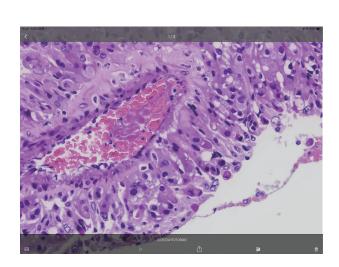
The previous image

The next image

Share a single image to the social network

Export the image to the local album

Delete the picture





Click on the file name to rename



# (2)Video management

Click "Select" in the top right corner and then click the button at the bottom, from left to right, respectively:

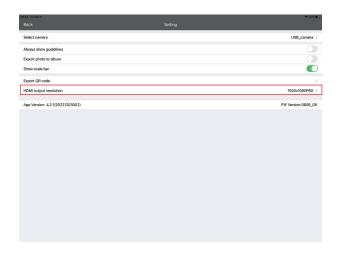
One-click Export to local album

Note: Please select Allow APP to access your album by setting your smart device "Setting - Privacy - Photo", otherwise it will prompt "Export fail".

One-click Delete

Search

# 1.4.4 APP settings



Always show guidelines:The operation guide will show every time you launch the APP after you check the box.

Export photo to phone album: The photos taken by the APP will be automatically backed up to your phone album after you check the box.

Empty data when exit: Exit APP will empty all pictures, videos, assignments and other files after you check the box, please operate carefully.

Show scale bar: Check the box to show the scale in the preview window, uncheck it to hide the scale.

APP version: Show the current APP version number.