

Quick Start Guide – Fluorescence Microscope

Excitation wavelength – 465nm (blue)

Emission wavelengths > 500nm (green – yellow – red)

This microscope has fluorescence filters built in and so it is designed for fluorescence microscopy only. The filter behind the objective lens blocks blue light and so you will only see green-yellow-red colours in the images from this microscope.

Microscope operation:

Press power switch to switch on microscope. Wait 20 seconds until blue light flashes. Hinge the mast up.

iPhone and iPad:

1. Download and install the ioLight app from the App Store
2. Connect iPhone / iPad to ioLightxxxxxx WiFi network
3. Start the ioLight app

Android:

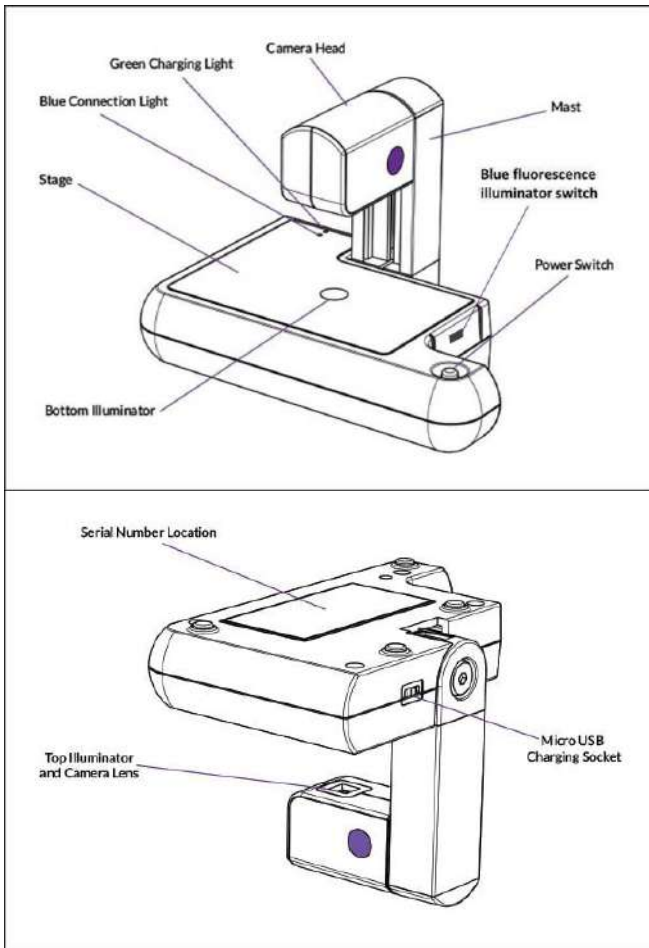
1. Download and install the ioLight app from the Play Store
2. Start ioLight app & follow the on-screen instructions to connect to the microscope's WiFi network
3. Your device may tell you that there is no internet available on the iolightxxxxxx network, if it does, choose 'Stay connected to this network'
4. Wait a few seconds for live image from the microscope

Web Browser:

1. Connect your device's WiFi to the iolightxxxxxx WiFi network
2. Open a web browser and type the address 192.168.1.1 into the URL bar

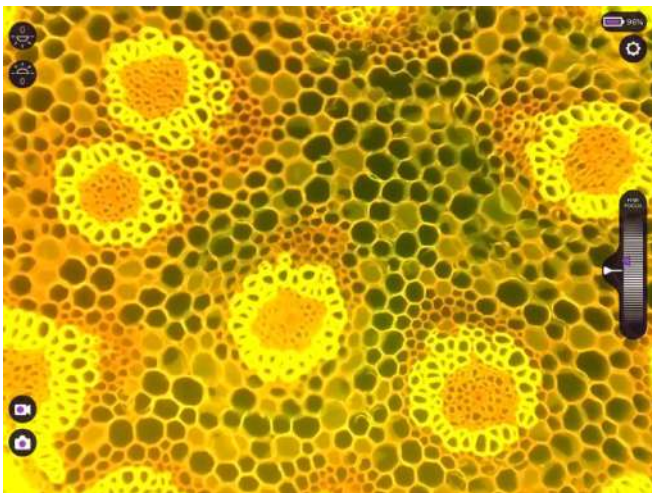
- Switch on at least 1 illuminator, either:
 - a. Switch on the white light from top and / or bottom illuminators using the on-screen controls. These illuminators can be used to help locate your fluorescent sample
Note: The filter behind the objective lens blocks blue light so the image will look green/yellow. The bottom white illuminator shines light at an oblique angle so the image will not look the same as a conventional brightfield image
 - b. Switch on the blue fluorescence illuminator using the switch on the side of the microscope as shown in the diagram below
- Place sample on stage above the base illuminator. It is a good idea to put the sample on a microscope slide since this allows the sample to be easily moved and it puts the sample in the correct position to get good illumination from the blue fluorescent illuminator
- Slide head down to focus the image – the head needs to be approx. 2mm above the sample for the image to be in focus
- Adjust fine focus using 'thumb wheel' on screen
- Move the sample to put the object of interest within the field of view
- Switch on the blue fluorescent illuminator and switch off the top and bottom illuminators
- Save a high quality image by pressing the camera icon on screen – the images are saved to your photos app or in your web browser's downloads directory
- Switch microscope off - press and release the power button on microscope. NOTE: it takes 10 sec for the microscope to switch off and the blue light to go out

Full software user guide - <https://iolight.co.uk/user-guide/>



Blue connection light	Continuously lit	Microscope is starting up or shutting down. Or microscope is streaming live images to a device
	Flashing	Microscope is on and ready to stream live images to a device
	Flashing long-short-long	Microscope battery is <20%
	Flashing fast	Microscope is in recovery mode (see trouble shooting)
Green Charging light	On	USB charger is connected and battery is charging
	Off	Battery has finished charging or no USB charger is connected
Power Switch	Switch on	A short press switches the microscope on. <i>Note: after pressing the power switch it takes approx. 20sec for the blue light to start flashing which signifies that the microscope is now on and ready to use.</i>
	Switch off	A short press switches the microscope off. <i>Note: switch off takes approx. 10secs then the blue light goes out</i> Press power switch hard and hold it for 5 seconds until the microscope switches off (blue light goes out). Only do this if there is a problem with the microscope.

Apps (Android and iOS)



Pinch on image - zoom (*not on iOS lower than 12.4*)



White illumination from above sample



White illumination from below sample



Save image



Record video



Settings menu (power off & grid - 0.115mm per division)

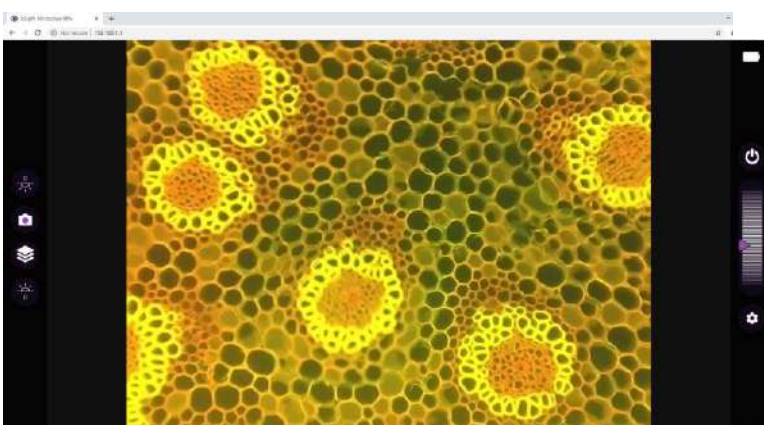


Fine focus. Tap the white triangle on the left hand side of the fine focus thumb-wheel to centre focus



Microscope battery charge level (*not on iOS lower than 12.4*)

Web Browser



Web browser only:



Microscope power off



Save 12 images for Z-Stack

Pinch, or mouse thumb wheel to zoom

Grid is 0.1mm per division