

Quick Start Guide – Compact Cell Imager with fluorescence

Excitation wavelength – 465nm (blue) Emission wavelengths > 500nm (green – yellow – red)

Press power switch to switch on microscope. Wait 20 seconds until blue light flashes.

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

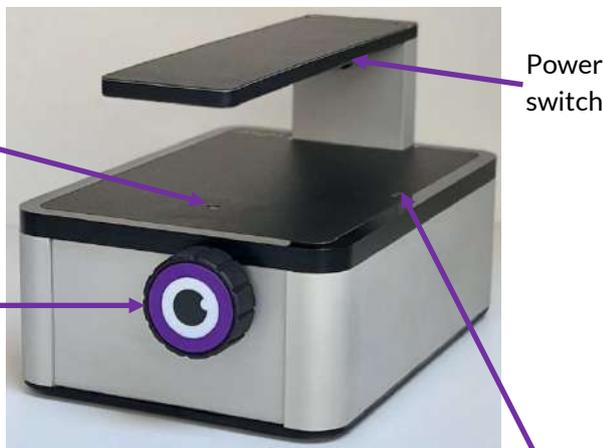
Android:

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 top and / or fluorescence illuminators using the onscreen controls (see next page)
- Place sample on stage above the objective lens
- Focus the image using the knob
- Adjust fine focus using 'thumb wheel' on screen
- 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

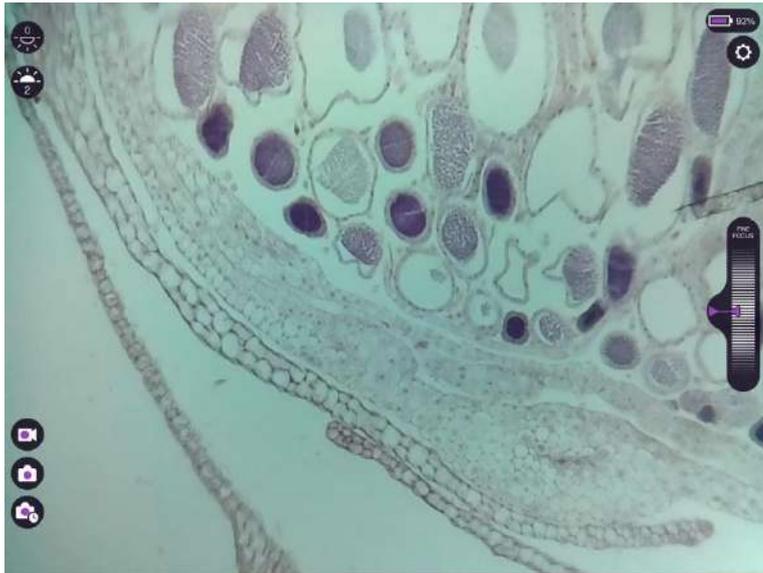


Blue connection light	Continuously lit	Microscope is starting up or shutting down. Or microscope is streaming live images to a device
	Flashing	Microscope is on and ready to stream live images to a device
	Flashing long-short-long	Microscope battery is <20%
	Flashing fast	Microscope is in recovery mode (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 and hold it for 5 seconds to reset the microscope (blue light goes out). Only do this if the microscope is not responding.

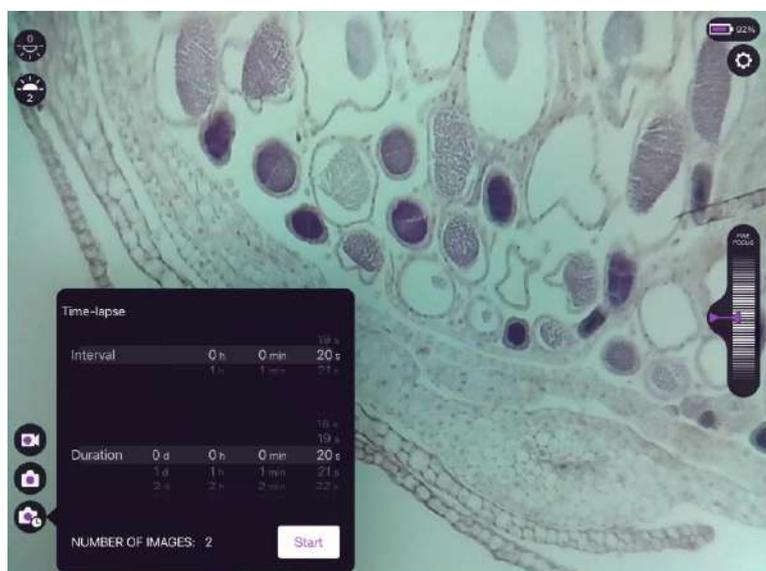
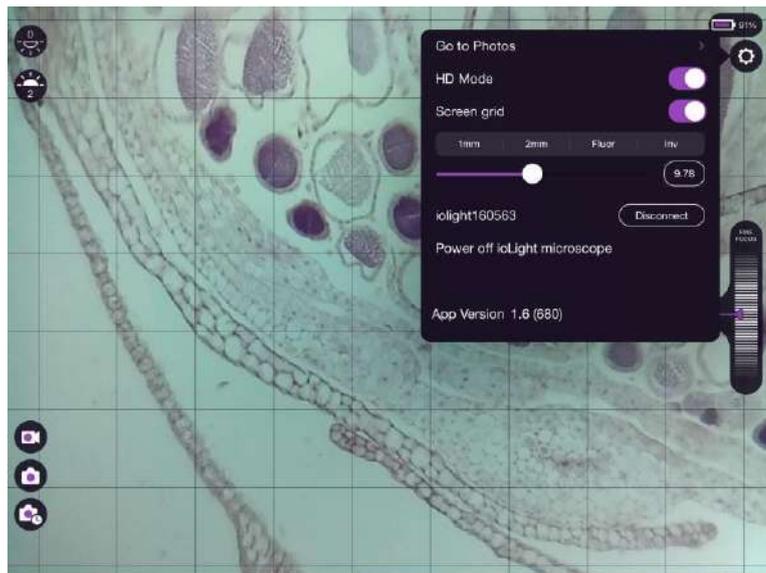
Charging lead

Serial number on base

Apps (Android and iOS)



100% Microscope battery charge level



Illumination from above sample:

- 0 - Off
- 1 - Brightfield
- 2 - Low NA Brightfield
- 3 - Darkfield
- 4 - All on



Fluorescence illumination from below sample

- 0 - Off, fluorescence filter disengaged
- 1 - Off, fluorescence filter disengaged
- 2 - Off, fluorescence filter engaged
- 3 - On, fluorescence filter engaged
- 4 - On high, fluorescence filter engaged



Save image - hold icon to record Z-stack of 9 images at different fine focus positions



Record video



Time-lapse images - see below



Settings - see below



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

Pinch on image - Zoom

Settings

HD mode:

On = high definition live image

Off = standard definition live image (best for general usage - higher frame rate and less prone to interference on live video)

NOTE - HD mode DOESN'T affect saved images - saved images are always highest resolution

Screen grid:

Use pre-set for your model microscope, or the slider or numerical box to set the desired number of grid squares across the image

Time-lapse

Set the interval between images, and the duration. Minimum interval = 20sec (2min for Z-stack)

If you hold your finger on the Time-lapse icon you get a Z-stack Time-lapse ie the microscope takes 9 images at different fine focus settings at each time point in the Time-lapse sequence.

Time-lapse imaging can run for a very long time so it is recommended that you:

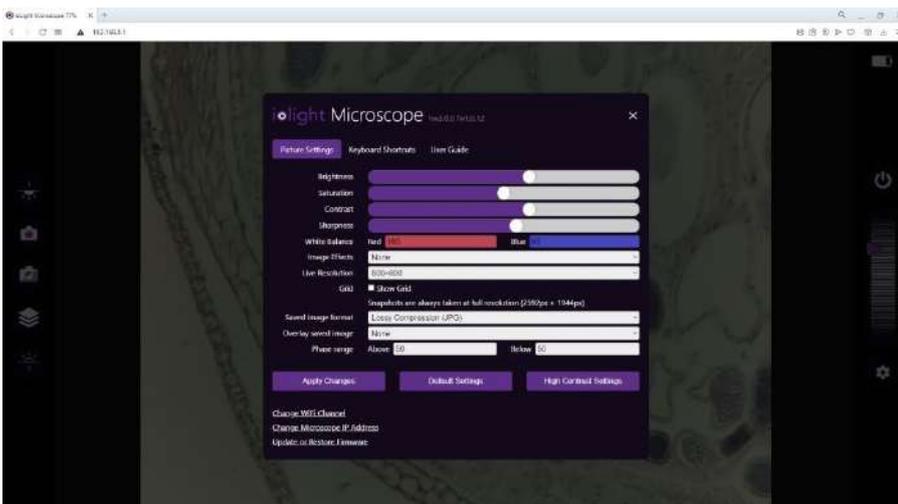
- Connect your microscope and Android/iOS device to their chargers
- Ensure that there is sufficient storage space on your Android/iOS device for the images (approx. 2-3Mb per image)
- Leave the ioLight app visible for the duration of Time-lapse

Web Browser



Web browser only

- Microscope power off
- Save 12 images for Z-Stack
- Save Digital Phase Contrast image (takes several seconds)
- Pinch, or mouse thumb wheel to zoom



Web browser Settings menu

- After changing a setting, press 'Apply Changes'
- 'Default Settings' resets settings for brightfield
- 'High Contrast Settings' sets high contrast for low contrast samples such as unstained cells
- Phase Range sets the amount of focus offset above and below current focus for the digital phase contrast image (range is 0-200)
- In the 'Keyboard Shortcuts' tab you will see shortcuts to access many settings more quickly

Settings in the Web Browser Settings Menu also take affect when using the iOS & Android apps

For full user guide go to <https://iolight.co.uk/user-guide/>